





HUDSON BAY MINING AND SMELTING CO., LIMITED

Incorporated December 27, 1927, Hudson Bay Mining and Smelting Co., Limited began as the first fully-integrated Western Canadian mining operation. Since then, it has become a large diversified natural resource enterprise with interests in base and precious metal mining, metallurgical extraction, marketing and exploration; oil and gas; fertilizer and agricultural chemical production and marketing; coal; and industrial operations. The Corporation employs more than 6,000 people in North America. Operations are carried out through wholly-owned divisions, subsidiaries and joint ventures with associated companies in Canada, the United States, and other areas of the world.

The Corporation is listed on the Montreal, Toronto and New York stock exchanges. At year end, there were a total of 10,101,739 common shares of the Corporation issued to a total of 8,316 shareholders.

HIGHLIGHTS

Consolidated net losses of \$11 million or \$1.06 per share, compared to earnings of \$41 million or \$4.10 per share in 1980 before extraordinary items

Inspiration Coal expands its operations through acquisitions

Modernization program continues at Canadian Metals Division and Inspiration Copper

Acquisition of 27% interest in Adobe Oil & Gas; restructuring proposal for Francana Oil & Gas

Consolidation of operations in U.S.

CONTENTS

Report to Shareholders	4
Human Resources	7
Canadian Metals Division	8
Inspiration Consolidated Copper Company	10
Exploration and Small Mines	12
Terra Chemicals International, Inc.	14
Francana Oil & Gas Ltd.	16
Inspiration Coal Inc.	18
Marketing	19
Operations by Segment	20
Consolidated Financial Statements	23
Selected Financial Data	42
Officers, Directors and Corporate Information	43

ANNUAL MEETING: The Annual meeting of shareholders will take place at 11:00 a.m., Monday, May 3, 1982 in the Commerce Hall of the Main Branch of the Canadian Imperial Bank of Commerce, King and Bay Streets, Toronto, Ontario.



REPORT TO SHAREHOLDERS

During the past year steadily deteriorating economic conditions, which particularly affected the metals sector of our business, resulted in a net loss for the Corporation of \$10.8 million compared to 1980 net earnings totalling \$41.4 million before extraordinary items. Not included in 1981 results is an interim payment of \$39.5 million received by the Corporation from the Saskatchewan Power Company. Earnings recognition on the settlement of this ongoing matter has been deferred until the Saskatchewan Court of Queen's Bench establishes value.

Last year's results underscore the Corporation's high dependence on earnings from cyclical commodities and the unpredictable metal price swings. Weak metal prices coupled with cost increases resulted in our two metals' operations contributing combined losses of \$14.5 million to our results. Our share of Inspiration Copper's losses was \$13.5 million while the Canadian Metals Division lost \$1 million. Approximately 60% of these losses occurred during the 4th quarter. Although Inspiration Coal's operations steadily improved during 1981, establishment costs, as well as production shortfalls at the Bailey mine, contributed to an overall loss, of which our share was \$1.8 million.

In 1981, our petroleum and fertilizer operations contributed earnings of \$7.6 million and \$5 million, respectively. However, both of these operations were adversely affected by a number of factors specific to each area and thus their earnings were not sufficient to offset the adverse impact of our metal operations. In the oil and gas sector, higher than anticipated Indonesian revenues partially offset the impact of Francana's interest costs on borrowings made to acquire a 27% interest in Adobe Oil & Gas. Terra Chemicals' earnings were adversely affected by reduced shipments of fertilizer and increased costs.

The overall results were particularly disappointing since the operations at all our units have improved considerably. Canadian Metals Division production was only slightly below 1980 and

considerable progress was made during the year in our metallurgical up-grading program. Construction was on schedule at three new mines which will begin operations during the next eighteen months. Inspiration Copper recorded improved recoveries particularly in the concentrator and refinery, and production levels exceeded target. Various capital programs were completed and the modified converter has been commissioned. However, deteriorating metal prices have more recently necessitated major reductions in operating and capital expenditures in both metals divisions. In this regard, Inspiration Copper's Christmas Mine has been shut down indefinitely. Further actions must be taken unless conditions improve. At Terra Chemicals, performance of the retail division continued to improve and the ammonia plants continue to operate at high levels.

During the year, some significant structural changes took place in order to diversify our resource base and consolidate our operations in the U.S. under Plateau Holdings, a company equally owned with Minerals and Resources Corporation Limited.

In 1980, Inspiration Coal Inc. (ICI) was formed in the U.S. and during 1981 it acquired the Bailey Mine in January and the Sovereign operations in July. The Wheelwright property was subsequently acquired in February, 1982. These acquisitions which, including excess working capital of \$US60 million, have cost us approximately \$US190 million and yield approximately 4 million tons annual production of high quality, low sulphur coal — both metallurgical, and steam or thermal coal. The total quality reserves which are strategically located in the coal-rich Appalachia area of the U.S. are now 161 million tons. Finally, ICI has signed a letter of intent with a U.S. subsidiary of Compagnie Francaise des Petroles, of France, to form a partnership with them to exploit these operations on a mutually advantageous basis.

In June, 1981, Terra Chemicals, which was a 54% subsidiary of Hudson Bay

Mining, was acquired by Plateau, with Minorco providing the cash necessary to acquire the public's interest. Accordingly, Terra is no longer consolidated in our results. Inspiration Mines Inc. was also established under Plateau in 1981 to develop and operate a number of small but attractive deposits acquired by our exploration teams.

These changes mean that the Corporation now has four operations under Plateau — Inspiration Copper, Inspiration Coal, Terra Chemicals and Inspiration Mines. We believe that these arrangements better position the Corporation in such key growth sectors as quality Appalachian coal, the important U.S. midwest agricultural industry and the North American base and precious metal mining sector. In addition, the consolidation of these operations will have important financial considerations and should also enable the rationalization of certain services to take place.

Francana Oil & Gas also expanded its resource base in August, 1981, with the acquisition of a 27% interest in Adobe Oil & Gas. Adobe has an extensive land position and proven reserves in the southwestern U.S. Under a proposed reorganization announced in February 1982, Francana's non-Canadian assets will be transferred to Hudson Bay Mining and Minorco. Francana's remaining shareholders will exchange their shares for common shares in Sceptre Resources Limited of Calgary, which will acquire Francana's Canadian operations. This reorganization, if approved by the shareholders, will relieve the Corporation of the discriminatory effects of the National Energy Program on Francana's Canadian oil and gas activities.

In closing, we are repositioning the Corporation to obtain a better balance and to facilitate further diversification. However, in the short term, we will concentrate on greater efficiencies and productivity, and the development of good people to manage our operations better. During the year, significant strides were made in addressing all

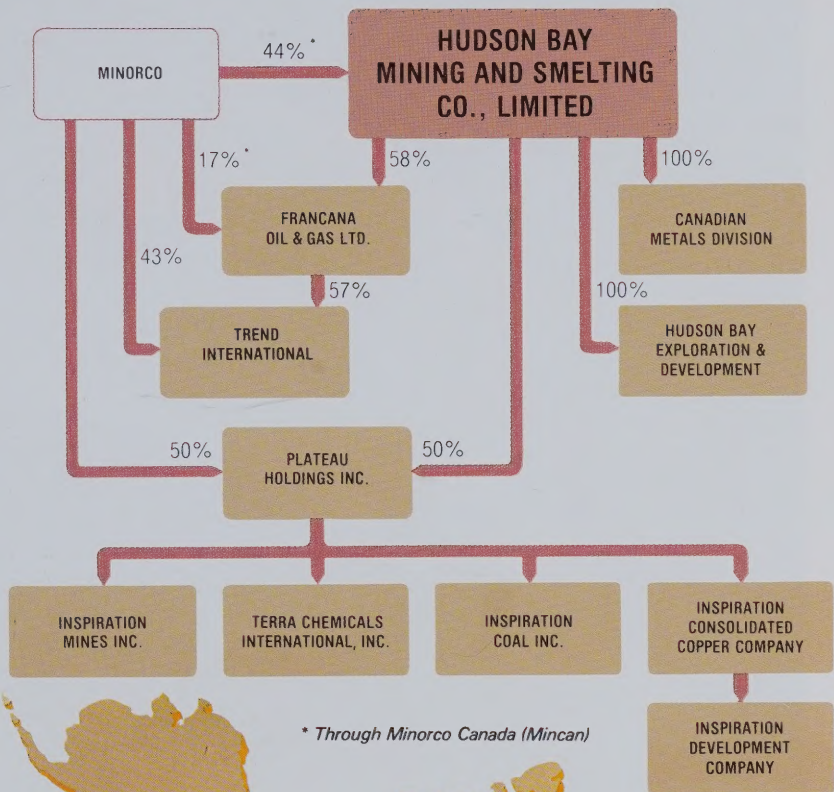
aspects of Human Resources, which are highlighted later in this report.

Changes affecting senior people in the Corporation included the resignation of Ralph G. Sultan as Executive Vice-President in November. Subsequently, Dr. J. Blair Howkins was appointed Senior Vice-President, Exploration and Corporate. Adrian M. Doull, former Senior Vice-President, Finance, relinquished his post in December to devote his full time to the position of Vice-President, Finance (Minorco) which he had also held. The position of Chief Financial Officer has been filled by David W. Perks, Vice-President, Finance and Treasurer.

This past year has not been an easy year for Hudson Bay Mining and its operating divisions and affiliates. Much has been asked of our employees at all levels, who have contributed willingly and effectively to the reorganizations and the many improvements which have taken place. The continuation of poor economic conditions, at least through the first half of 1982, and the assimilation of the major changes which have taken place in the Corporation in 1981 and will continue in 1982, will strain our resources. However, we are confident that the dedication, loyalty and skills of our employees, and the strength of new business relationships, put the Corporation in a strong position to meet the challenges which it will surely face in 1982.

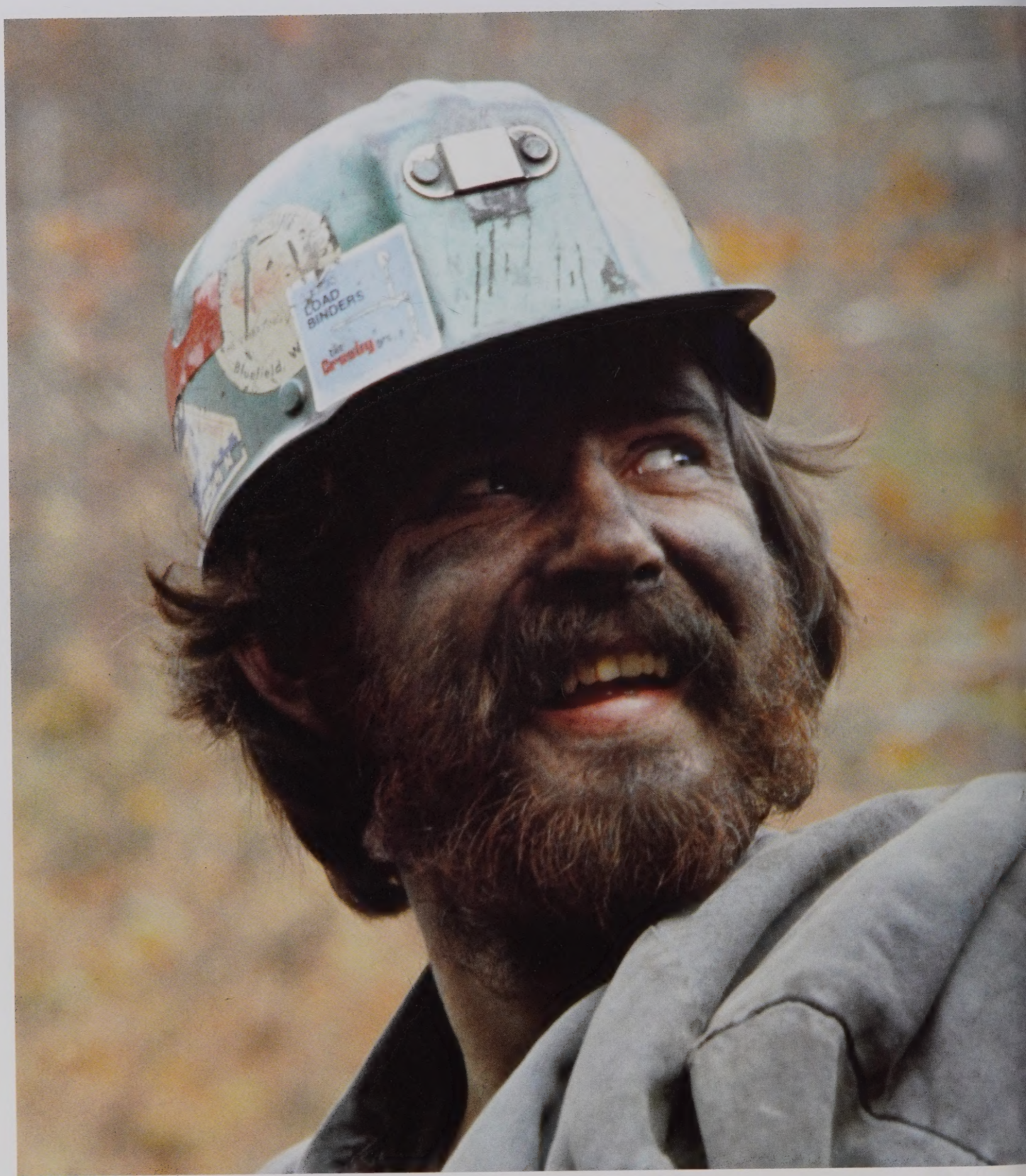
E.P. Gush

E.P. Gush
Chairman, President and Chief
Executive Officer
March 4, 1982.



* Through Minorco Canada (Mincan)





HUMAN RESOURCES

The Hudson Bay Mining and Smelting Co., Limited group of companies has grown from the first fully-integrated Western Canadian mining operation to a large diversified natural resource enterprise, employing more than 6,000 people in North America.

The rapid and unpredictable change in our environment makes the achievement of the Corporation's goals dependent more than ever on its people. Changing markets, economies and politics can have severe impact on our business.

We recognize that corporations which maintain high standards of technical excellence in a highly competitive marketplace, and which formulate and execute comprehensive business plans, while retaining the skill to adapt quickly and decisively to unforeseen problems or opportunities, will succeed.

Traditionally, each operation of the Corporation has pursued its own human resource development policies and programs to meet particular needs. While those programs continue, co-ordinated effort to ensure the best utilization of our human resources throughout the Corporation is more evident than ever before. For these reasons Hudson Bay Mining's ongoing commitment to human resources planning and development became even stronger in 1981.

Co-ordinated plans to develop and strengthen employee training and educational development, meet increasingly stringent safety and environmental standards, improve labour relations, and meet the challenges associated with chronic shortages of skilled personnel are areas of emphasis.

Educational development seminars and training programs continue to attract a large number of employees. For example, at the Flin Flon operations, more than 2,000 employees took part in Training Centre programs in such diverse areas as first aid, retirement seminars and workshops in engineering, geology, purchasing and long-range planning. Tuition refund programs assist employees to pursue post-secondary education at their own pace, while scholarships

and bursaries for advanced education to qualified employees and their dependents continue to be offered. Educational leave-of-absence programs allow qualified employees to pursue advanced education on a full-time basis while retaining seniority and benefits.

In 1981, the retail division of Terra Chemicals inaugurated Terra University in Sioux City, Iowa to provide location managers and sales representatives with an extensive 3-year program of studies in management, marketing and technical skills. More than 160 people are currently enrolled in the program.

An increasing awareness of safety procedures throughout the Corporation's divisions has resulted in a reduced number of manhours lost to injury. Safety training, including the use of audio-visual aids and accident investigation seminars have been instituted in all divisions. Terra's operation in Port Neal perpetuated its fine record by going more than 1 million manhours without a lost-time injury recorded in 1981.

Large-scale technical advances have improved the quality of the workplace for a large number of employees. For example, the Inspiration Consolidated Copper smelter is one of the most environmentally advanced in the U.S.

There has been general improvement in communications and labour relations in 1981, with most divisions experiencing positive labour relations and successful negotiations.

Inspiration Copper initiated a Quality Circle Program, a plan which brings together members from the bargaining unit and management to meet on a regular basis to discuss solutions to quality/production problems. The experimental program culminated in an audio-visual display to senior management, resulting in the implementation of many of the pilot group's suggested solutions. The success of the initial Quality Circle Program has led to the actual and proposed establishment of similar programs in other divisions. Throughout the Corporation, the innovative ideas and insights of skilled and experienced employees have improved

productivity and employee job satisfaction.

Like most companies in the natural resource sector, Hudson Bay Mining suffers from a shortage of skilled personnel in professional, technical and trade areas. The situation is not one for which there are quick solutions. However, the Corporation's apprenticeship programs and overseas recruitment drives, together with student employment, have grown increasingly successful. For example, in 1981, 112 new apprentices joined the program in Flin Flon, bringing the total to 235 by year-end. In conjunction with area community colleges, all divisions offer comprehensive apprenticeship programs covering a broad range of jobs.

Technical training is reinforced at the management and supervisory levels with programs to improve leadership and managerial skills. Manpower planning and career path programming are also high priority activities.

In general, 1981 has been a year in which the Corporation and its employees have achieved tangible success in meeting the challenges of a rapidly changing world. A commitment to a series of programs which emphasize human resources as much as natural resources will not bring sweeping changes overnight, but will lay a firm foundation for continued growth.

CANADIAN METALS DIVISION

The Canadian Metals Division represents the Corporation's Canadian mining and metallurgical operations located in the Flin Flon/Snow Lake area of northern Manitoba, in the Yukon, and located, through a 37.5% equity interest in Tantalum Mining Corporation of Canada Limited, in southeastern Manitoba. In addition, Francana Minerals in Saskatchewan produces sodium sulphate for the detergent and the pulp and paper industries; Zochem and Hudson Bay Diecastings in Ontario produce zinc oxide and zinc-based diecastings, respectively. With the exception of tantalum oxide, all metals are sold through the Corporation's Marketing Division while industrial products are sold through the Division's sales staff. Consolidated sales for 1981 were \$292 million (\$309 million in 1980). As a result of depressed metal prices, the Division showed a net loss of \$1 million in 1981 (\$30.9 million profit in 1980). Operating costs continue to escalate

substantially due to higher than normal increases in the cost of labour, energy and supplies.

Although copper production set a new annual production record, disappointing sales volumes and prices resulted in a 6% decrease in sales revenue.

Weak automotive markets continued to adversely affect both zinc oxide and diecasting operations. Demand for sodium sulphate also dropped off during the year.

On April 1, 1981, the Island Falls power plant, owned by Churchill River Power Company Limited, a wholly-owned subsidiary, was sold to Saskatchewan Power Corporation. An interim payment of \$39.5 million was received during the year with further compensation to be determined by the Saskatchewan Court of Queen's Bench. All external power requirements for the Flin Flon/Snow Lake operations are now supplied by Manitoba Hydro. This change resulted in substantially increased power costs at these operations.

MINING OPERATIONS Flin Flon/Snow Lake

The Flin Flon/Snow Lake operations, employing more than 2,700 people, consist of four operating mines, a concentrator, a copper smelter and a zinc refinery in Flin Flon, Manitoba, with five operating mines and a concentrator at Snow Lake, Manitoba. As mine production is not adequate to keep metallurgical plants operating at capacity, the company purchases both copper and zinc concentrates as required.

Copper production increased 2.4% to 74,134 tons. Zinc production was 74,596 tons, 2.6% lower than 1980 as a direct result of purchased concentrate shortages.

All mines produced throughout the year resulting in an increase of 3.2% in tons of ore mined.

New mine development continued at Spruce Point, Rod and Trout Lake properties. The shaft sinking at Spruce Point was completed in July and lateral development is underway. A significant amount of development ore will be treated in 1982. Shaft sinking at the Rod Mine commenced in July and at year-end had reached 1,082 feet below the collar.

The Trout Lake decline has reached the ore body and production from this mine is scheduled for mid-1982.

The new hot purification circuit was successfully commissioned in the zinc leaching plant in June. The new zinc roaster precipitator, to reduce particulate emissions to the atmosphere, was almost complete at year-end. Construction of a modern zinc casting plant is on schedule and will be completed mid-1982.

Whitehorse Copper Mines

Whitehorse Copper Mines operates a 2,500 TPD underground mine and concentrator complex in southwest Yukon producing a high grade copper concentrate with significant gold and silver values.

A change in ore source during the year, as the Little Chief deposit approached exhaustion, resulted in some production problems and lower than expected copper production.



Molten copper flows into a revolving anode casting wheel at the Flin Flon smelter.

Approximately one and one half years of economic ore reserves remain.

Tantalum Mining Corporation

Tantalum oxide production totalled 297,234 lbs. in 1981, while sales for the year totalled 229,169 lbs. as markets softened dramatically during the year.

Mill recoveries improved significantly in the last half of the year as a result of revisions to circuitry, improved operating procedures, and a decision to reduce throughput from 1000 to 800 tons per day. Ore mined was very close to reserve grade at 0.12% tantalum oxide.

Plans for 1982 include research on fine tantalum recovery, an engineering study for a ceramic grade spodumene plant, and continuing economic evaluation of other mineral resources contained within the Bernic Lake orebody.

Industrial Products Operations

The two sodium sulphate plants operated at near capacity for most of 1981, producing a total of 95,210 tons of sodium sulphate.

Although zinc oxide markets remained depressed throughout the year, Zochem was able to maintain sales volume at the 1980 level. Severe price competition, discounting and increased production capacity, however, resulted in smaller margins over zinc metal and this reduced profit substantially.

Plant capacity utilization at Hudson Bay Diecastings remained at a low level.

SENIOR MANAGEMENT

H.S. Schwartz,
President
A. Pyatt,
Senior Vice President-Operations
R.R. Galipeau,
Vice President-Finance
T.A. O'Hara,
Vice President-Technical Development
W.K. Callander,
*Vice President/General Manager-
Flin Flon/Snow Lake Operations*
R.D.B. Linzey,
Vice President-Whitehorse Copper Mines
L.R. Nilsen,
*Vice President-Operations, Tantalum
Mining Corporation*
D.B. Clark,
Industrials Marketing Manager
R.V. Tomkins,
General Manager-Francana Minerals

PRODUCTION CHARTS

For Canadian Metals Division:

Metal production Flin Flon

	1981	1980
Refined copper (lb)	148,268,850	145,013,041
Slab zinc (lb)	149,193,500	153,031,226
Gold (oz)	65,214	74,352
Silver (oz)	1,267,288	1,314,619
Lead in concentrate (lb)	1,175,162	1,270,700
Cadmium (lb)	184,804	194,290
Selenium (lb)	84,000	97,000

Total Mine Production

	tons	Au oz/ton	Ag oz/ton	Cu %	Zn %
Total Flin Flon/Snow Lake 1981	1,935,016	.034	.486	2.01	2.34
Total Flin Flon/Snow Lake 1980	1,875,369	.035	.536	2.10	2.61

Concentrator production Flin Flon/Snow Lake

	1981	1980
Ore milled (tons)	1,933,670	1,875,760
Copper concentrate (tons)	191,571	193,858
Zinc concentrate (tons)	60,046	63,926
Lead concentrate (tons)	810	1,051

Snow Lake concentrator produced 47.8% of total copper, 59.7% of total zinc concentrate from Company ores.

Zinc Refinery

	Zn(lb)	Cd(lb)
From HBMS feed	56,948,250	60,702
From purchased concentrates	92,245,250	124,102
Total 1981	149,193,500	184,804
Total 1980	153,031,226	194,290

Copper Smelter

	Anodes tons	Au(oz)	Ag(oz)	Cu(lb)	Se(lb)
From HBMS feed	32,968	33,227	570,626	65,610,310	140,710
From purchased concentrates includes Whitehorse Copper production	41,617	34,411	711,846	82,821,060	—
Total 1981	74,585	67,638	1,282,472	148,431,370	140,710
Total 1980	73,286	76,430	1,333,375	145,795,766	144,134

Whitehorse Copper Mines production

	1981	1980
Ore milled (tons)	800,378	854,306
Ore grade (% Cu)	1.42	1.58
Concentrates produced (tons)	22,140	26,145

Tantalum Mining Corporation production

	1981	1980
Ore milled (tons)	151,950	162,212
Ore grade (% Ta ₂ O ₅)122	.136
Tailings reprocessed (tons)	55,074	34,779
Ta ₂ O ₅ produced (lb)	297,234	297,512

Ore reserves†

	tons	Au oz/ton	Ag oz/ton	Cu %	Zn %
Flin Flon/Snow Lake*					
At December 31, 1981	16,143,300	0.034	0.53	2.58	2.9
At December 31, 1980	17,070,400	0.035	0.54	2.67	2.8
Whitehorse Copper Diluted, recoverable:					
At December 31, 1981	1,325,000	—	—	1.35	—
At December 31, 1980	1,842,000	—	—	1.40	—
Tantalum Mining Proven, probable and possible:					Ta ₂ O ₅ %
At December 31, 1981	1,154,000				0.144
At December 31, 1980	1,210,000				0.139
Stored tailings:					
At December 31, 1981	743,000				0.065
At December 31, 1980	798,000				0.073

*Includes 44% of proven reserve of Trout Lake orebody.

†Tom Valley Deposit diluted recoverable reserves at December 31, 1981, totalled 9,508,000 tons containing 2.3 oz/ton silver, 7.6% zinc, and 6.9% lead.



SENIOR MANAGEMENT

Peter Steen,
President and Chief Executive Officer
J. Burgess Winter,
Vice President and General Manager
Robert F. Morison,
*Vice President-Administration
and Secretary*

Michael B. Smith,
Vice President-Finance
Gordon W.D. Petrie,
Asst. Vice President-Finance and Treasurer
Jacob Timmers,
Assistant General Manager

Inspiration Consolidated Copper Company, owned equally by Hudson Bay Mining and Smelting Co., Limited and Minerals and Resources Corporation Limited, is engaged principally in the production and sale of copper. Its operations in the state of Arizona include mines, concentrators, sulphuric acid plant, smelter, refinery, solvent extraction and rod fabricating plants. It also smelts copper-bearing materials for other producers, and owns and operates a silver-bearing silica flux mine in the state of Montana.

Inspiration's overall loss in 1981 totalled \$US22.2 million, compared to a loss of \$US17.6 million, a year ago. The 1981 results include a gain of \$US10.4 million realized on the sale of the Ferron Canyon coal properties in Utah.

Although copper production levels for the year increased substantially over the previous year, copper sales and earnings suffered from weak demand and continuing low metal prices. During the year however, considerable progress was made at the operations level in terms of improved metal recoveries, efficiencies and costs.

As the recession in the U.S. economy worsened throughout 1981, the state of the copper industry reflected very sluggish performance in the construction and automobile industries, two major users of copper. The overall loss was exacerbated by lower silver and gold selling prices, and high interest charges.

In the face of continuing depressed market conditions, Inspiration Copper announced an indefinite closure of its Christmas mine, effective January 2, 1982, and a reduction in both salaried and day's pay employees at other Arizona operations.

Mine

Six WABCO haulage trucks of 170-ton capacity were leased in 1981 to cope with the demands of the waste removal and dump leaching systems, resulting in improved mining productivity.

Concentrator

Concentrator performance in 1981 was excellent and the benefits of the capital investment for modernization were realized in improved throughput, recovery and concentrate grade, while operating unit costs showed a concomitant decrease.

A new filter incorporating modern technology was installed at the Concentrator, which has improved performance to the extent that the dryer will be eliminated on completion of the project. Filtering and drying costs have already been reduced substantially. Personnel have done a commendable job in adapting the new equipment to Inspiration concentrates.

Smelter

Smelter production finished ahead of target and within the operating cost budget for the year. Sulphur recovery was the highest ever and in the last few months of 1981 was well in excess of 90% — a notable achievement for any smelter, and what is believed to be the highest rate of sulphur capture in the state of Arizona.

The first converter has been modified to a design conceived by Inspiration personnel. Initial operating results exceed projections in terms of both increased throughput and elimination of fugitive emissions.

Construction is underway to implement a recovery process for revert material presently in waste dumps by transferring the material to a crushing plant and returning it to the converters and the electric furnace. The system will be operated from the smelter control room.

A new \$US3 million instrumentation monitoring system, now in operation, collects and monitors operating information from the smelter and acid plant for display on central TV screens from which the operator can instantly assess the status of all the operations. The custom interface of the system was designed by Inspiration personnel.

Refinery

Toward the end of the year the electro-refining current efficiency had risen to 93-94% which is comparable with most modern refineries.

Rod Fabricating Plant

Since March, Inspiration has been able to run this facility at 47.3% above its original design capacity with the reinstatement of three shifts per day. The company is studying further modernization of the plant and efforts to boost productivity and raise product quality are continuing.

Summary

Although the outlook for 1982 is bleak in terms of price for Inspiration's principal products, the company is in the position of being able to show significant improvement when market conditions rebound. First signs of such a recovery could be evident in the second half of 1982. Until then, the company is cutting back on operating costs and capital expenditures wherever possible and capital projects are being postponed or stretched out. Only those projects absolutely essential are being undertaken.

Production

Inspiration and Christmas Mines

	1981	1980
	<i>(in thousands)</i>	
Total ore and waste (tons)	41,700	27,492
Average grade of ore mined	0.503%	0.562%

Inspiration and Christmas Concentrators

Copper produced:

Inspiration Mill (lb)	57,085	39,515
Christmas Mill (lb)	17,806	13,153
Leaching (lb)	54,513	37,143
TOTAL (lb)	129,404	89,811

Smelter and acid plant

New metal bearing material treated:

Company production (tons)	139	104
Toll material (tons)	237	170
Total treated (tons)	376	274
Total copper cast (tons)	111	82
Sulphuric acid produced (tons)	285	176

Refinery

Total cathodes (lb)	144,017	81,623
Rod Plant		
Rod (lb)	144,412	74,582
Crop bar (lb)	2,095	2,184
Total Copper (lb)	146,507	76,766

Ore Reserves

Copper ore reserves at:

Inspiration area mines	220,673	0.51
Christmas open pit mine	7,567	0.63

Estimated mineable ore reserves at the Black Pine mine at December 31, 1981, were 2,046,000 tons of ore with a grade of 0.35% copper and 5.17 oz of silver per ton.

Dry short tons (in thousands) Grade (%Cu)

EXPLORATION AND SMALL MINES

Exploration activities are carried out by separate companies in Canada and the United States.

Hudson Bay Exploration and Development Company Limited is a wholly-owned subsidiary of Hudson Bay Mining and Smelting Co. and conducts mineral exploration in Canada on behalf of the parent company. In 1981 exploration for its own account was conducted in Nova Scotia, Manitoba, Saskatchewan and the Yukon. Joint venture projects in participation with Minorco Canada Limited and Tombill Mines were conducted in Quebec, Ontario, the Athabasca uranium area of Saskatchewan, British Columbia and the Yukon. Surface exploration diamond drilling totalling 121,337 feet in 255 holes was done to test 154 anomalies and to further investigate several mineralized zones. Airborne electromagnetic and magnetic surveys were flown over a total of 17,044 miles in several areas of Manitoba, Saskatchewan and the Yukon.

At the Tom Valley lead zinc project near MacMillan Pass on the Yukon-N.W.T. boundary, work continued in 1981 on underground development and assorted engineering studies. The decline was advanced 2,863 feet to a depth 410 feet vertically below the adit level. Eight underground diamond drill holes were completed for a total of 2,264 feet. Current economic conditions have prompted the decision to complete the mining contract in 1982 and to defer most of the underground diamond drilling and other studies until a more favourable time.

On the property near Ross River, Yukon, optioned from Risby-Tungsten Mines Ltd. (now Imperial Metals Corporation) surface diamond drilling continued to test the tungsten-bearing skarn zones located by previous work. Nine step-out holes were drilled for a total of 7,161 feet. The two mineralized skarn zones which are separated by 65 feet of waste have been traced along a strike for 2,100 feet and down dip for 1,900 feet. The zones remain open at depth. Additional exploration will depend upon the results of an evaluation to be completed in early 1982.

On the former gold-producing property at Snow Lake, Manitoba, optioned from Nor-Acme Gold Mines Limited, two deep diamond drill holes and three holes wedged from them, intersected gold bearing mineralization down to about 1,000 feet below the old mine workings at the 1,780 level. Geophysical surveys on selected parts of the property will be carried out in 1982.

A three-year option agreement was signed with Pine Bay Mines Limited on their Sourdough Bay property located 10 miles east of Flin Flon. Previous work located a deposit containing an estimated 400,000 tons of reserves averaging 3.2% copper. This deposit will be investigated at depth by drilling from surface in 1982.

The 1982 budget controlled by Hudson Bay Exploration totals \$6.5 million including \$0.6 million to be contributed by other participants in shared programs. Approximately 69% of the total exploration budget will be spent in the Flin Flon/Snow Lake area, 19% in the Yukon, 8% in British Columbia and 4% in Eastern Canada.

Inspiration Development Company, a wholly-owned subsidiary of Inspiration Copper Company, continued to explore for economic mineral deposits in the western United States at a cost of \$US5.6 million in 1981.

There were a number of significant events during the year, including the transfer of four properties to a newly formed company, Inspiration Mines Inc., for future development, and the completion of a joint venture agreement for further exploration of the Easter molybdenum project in Nevada, with a subsidiary of Union Oil Co. The sale of the Ferron Canyon coal property in Utah to a subsidiary of Sun Oil Co. yielded a gain of \$US10.4 million plus guaranteed future income. Construction of a mine and mill facility was completed on a property near Hillsboro, N.M. by Quintana Minerals Corporation. Production will commence in 1982 resulting in royalty income for Inspiration Development under the terms of an agreement with Quintana. A new custom built Induced Polariza-

tion (IP) transmitter truck for geophysical prospecting was also commissioned during the year.

Two ongoing projects are of particular note with respect to the year's program. In Nevada and southern Oregon several claim groups have been located for microscopic gold deposits of the Carlin type. Geochemical surveys are in progress and several anomalous areas have been identified. Further geochemical surveys and drilling will be done in 1982 on these claims. Also in Nevada, a large group of claims has been located and others leased in an area of interest for exploration for copper, nickel, cobalt, silver and platinum group metals, found in basic Precambrian rocks.



The Inspiration Development approved budget for 1982 has been reduced to \$US4.4 million, from the \$US6 million approved for 1981. Concentration on property examination and regional exploration to develop new project areas will be the main focus of the 1982 program.

Inspiration Mines Inc.

Inspiration Mines Inc., owned equally by HBMS and Minorco, was organized in June, 1981 to develop various small orebodies on presently owned or controlled properties. The acquisition of other dormant and operational properties with existing reserves, and the development of new properties in the U.S. and Mexico will also be investigated.

Since IMI's incorporation, an intensive review of various properties has been carried out to establish individual project feasibility and priority. Investigation, construction and commissioning schedules will then be decided. Projects presently under consideration include the Sanger Mine, Ima Mine, Round Valley Mine, Bay-horse Mine, Illinois-Wisconsin Zinc properties, and a mill at the Black Pine Mine.

Black Pine Mine

The Black Pine silver-copper mine, located near Philipsburg, Montana, is a wholly-owned subsidiary of Inspiration Consolidated Copper Company, and is operated by Inspiration Mines Inc. The mine previously shipped silica flux to the Anaconda Company smelter at Anaconda, Montana, but the closure of that facility in September of 1980 has resulted in temporary curtailment of mining.

Mine development continued during 1981 with a total of approximately 60,000 tons of development ore produced. Mining was curtailed in the first quarter of the year due to falling metal prices and the lack of economically viable markets. Ore shipped during 1981 totalled 31,607 tons.

Pilot plant testing of Black Pine ore was conducted at the Montana Tech Mineral Research Center in Butte, Montana, during March, 1981. This testing, along

with additional testing at Inspiration Copper proved the feasibility of milling Black Pine ore and provided information for the design of a processing plant at Black Pine.

A contract was negotiated for the use of a 500 ton-per-day milling facility located in Philipsburg. The plant was completed and start-up accomplished during December, 1981. Full production was achieved by February, 1982, thus enabling production at Black Pine to resume.

Sanger Mine

The Sanger silver mine is in Esmeralda County, Nevada, approximately forty miles east of Bishop, California. Diamond drilling by Inspiration Development Company shows silver mineralization over 1,200 feet in strike length and 200 feet in vertical height, in three separate veins.

Work on the mine during 1981 comprised driving a decline from surface to intersect the vein system about 20 feet below the 200 ft. level.

Ima Mine

The Ima silver-tungsten, molybdenum mine is located in Lemhi County, Idaho. Ore reserves in the proven-probable categories are estimated at about 1,000,000 tons with recoverable values in tungsten, molybdenum and silver.

Metallurgical pilot plant work was started in July, 1981.

Round Valley Mine

The Round Valley tungsten mine, located near Bishop, California, produced tungsten during World War I, but production since then has been sporadic. The property was acquired by Inspiration Development Company in 1979 and subsequent exploration work has developed reserves in two separate ore bodies below the old workings to a depth of about 700 feet. The mine will be developed from a 3,150 foot decline which will open the upper orebody for trackless mining. Negotiations are currently being conducted for a joint venture to mill the Round Valley ores.



(Above) Custom built Induced Polarization transmitter truck for geophysical prospecting.

(Below) Loading ore at the Black Pine silver-copper mine.

SENIOR MANAGEMENT HUDSON BAY EXPLORATION

Dr. J.B. Howkins, *President*
P.L. Martin, *Vice President*
G.E. Bidwell, *District Manager-Whitehorse*
P.J. Deveau, *District Manager-Vancouver*
A.T. Baumgartner, *District Manager-Flin Flon*
J.G. Bragg, *District Manager-Toronto*

SENIOR MANAGEMENT INSPIRATION DEVELOPMENT COMPANY

Dr. J.B. Howkins, *President and Chief Executive Officer*
J.G. Kuhn, *Vice President*
H.W. Olmstead, *Chief Exploration Geologist*
T.J. Montgomery, *Property Superintendent*
T.A. Conto, *Chief Geophysicist*

SENIOR MANAGEMENT INSPIRATION MINES INC.

Dr. J.B. Howkins, *President*
J.J. Ellis, *Vice-President*
D.W. Perks, *Vice-president and Treasurer*
C.K. Taylor, Q.C., *Vice-president and Secretary*
M. Brewer, *Assistant Secretary*
S. Kozel, *Assistant Secretary*

TERRA CHEMICALS INTERNATIONAL, INC.

Terra Chemicals International, Inc., owned equally by Hudson Bay Mining and Smelting Co., Limited and Minerals and Resources Corporation Limited, is engaged primarily in the wholesale and retail marketing of a full line of chemical fertilizers and crop-protection chemicals. The chemical fertilizers sold are nitrogen, phosphate and potash products. Crop-protection chemicals include herbicides, pesticides and fungicides. The company also sells nitrogen animal feed ingredients consisting of urea products to feed manufacturers.

Net sales for 1981 totalled \$US317 million, an increase of 19% over last year's sales of \$US265 million. Net earnings, amounted to \$US9.2 million compared with \$US10.3 million in 1980. Prices did not keep up with costs. The spring season was not up to earlier expectations, and because of a late harvest and low grain prices, the fall fertilizer season was also slow, with farmers apparently deferring application of fertilizer until spring.

Fertilizer sales were not as good as had been expected for 1981 and not up to past years. However, sales of agricultural chemicals increased by approximately 37% to \$US165 million making Terra the fourth largest company in domestic agricultural chemical sales in the U.S.

Terra markets its products at both the retail and wholesale levels. Through a network of more than 100 retail farm service centres in the midwest, south and southwest of the U.S., the company sells fertilizer, crop-protection chemicals, seed and other farm products directly to the farmer. Equipment and services required for application of such fertilizers and chemicals are also offered. Wholesale marketing of produced and purchased nitrogen products, phosphates and potash to dealers, distributors and manufacturers extends through the mid-western and southwestern U.S. Three wholesale regional offices are located in Iowa, Illinois and Texas.

Several significant events occurred during the year. In June, Hudson Bay Mining and Minorco each became 50%

indirect owners of Terra Chemicals, replacing all of the remaining public shareholders.

In April, Terra acquired Hunt Seed Company of Lubbock, Texas, its first step toward entrance into the seed breeding and production business.

In December, Terra executed a letter of intent with Simonsen Mill, Inc. of northwestern Iowa to acquire certain assets and inventories of Simonsen. The transaction involves the acquisition of nine retail outlets, all within a 60-mile radius of Sioux City and the Port Neal manufacturing operations. Terra assumed management of the outlets on December 15. Funds for acquisition of Simonsen were provided through the closing of existing Terra outlets that did not and could not deliver an adequate return on investment.

Through the 1980s, American agriculture will continue to be the most productive in the world and will continue to be the dominant factor in world agricultural trade. Beginning with the latter half of 1982, U.S. farmers should enjoy increasing crop prices that truly reflect the value of their production. Short-term, however, the U.S. agricultural economy faces declining prices in response to 1981's large crop yields, both in the U.S. and abroad, and insufficient export demand. With slow economic growth and high interest rates expected to continue at least through the first half of 1982, general economic conditions are unlikely to boost agricultural prices in the near term. Farm income is not likely to be significantly higher than the 1980 level.

Terra expects that U.S. farmers will be conservative in their purchase decisions, resulting in only 1% - 2% increases in consumption of nitrogen, phosphates and potash. No increase in overall consumption of crop-protection chemicals or seed is expected for 1982.

Wholesale Operations

Fertilizer sales to wholesale customers during this year totalled \$US59.8 million compared with \$US55.3 million in 1980. Feed urea sales were \$US12 million compared with \$US12.6 million in 1980.

A major objective of the wholesale division is to develop the prime target marketing area around Woodward, Oklahoma, with the goal of increasing market share within a 200-mile radius of Woodward. Nitrogen solution sales in the Woodward area for 1981 increased 24% over 1980.

Retail

Terra operates more than 100 retail farm service centers in 15 states as stand-alone business enterprises, to market fertilizers, crop-protection chemicals, seed and allied products and services to growers and, in specified areas, to dealers.

Retail sales for the year were \$US283 million an increase of 23% over 1980 sales of \$US231 million. Gross profit of \$US48.6 million was an improvement of \$US3.4 million over 1980 even though gross margin decreased by 2.6% because of competitive pressures and increasing costs.

Although expansion of retail locations is based on meeting stand-alone financial criteria, priority is assigned to target markets that can be economically serviced from the manufacturing complexes at Port Neal, Iowa and Woodward, Oklahoma.

Supply and Distribution

Terra's logistics activities include the purchase of nitrogen, phosphorus and potassium-bearing fertilizers in large quantities. Basic only in nitrogen, the company also purchases additional nitrogen products to satisfy marketing demand. More than 400,000 tons of products, valued at about \$US50 million, were purchased in 1981 through a centralized system which takes advantage of economies of scale while providing flexibility for local purchasing opportunities. Crop-protection chemicals worth over \$US130 million make up the other large block of purchased materials.

Deregulation of the trucking industry presents opportunities for greater utilization of private trucking. Terra is taking advantage of newly available cost savings by operating trucks itself.



Railroad deregulation presents both problems and opportunities. To combat increasing rail costs, the company will oppose prejudicial rate treatment against movement of nitrogen solutions.

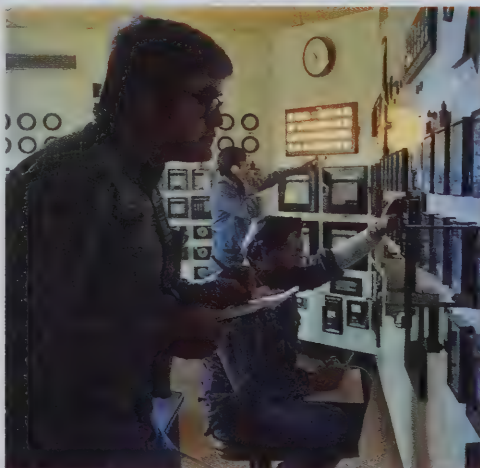
Three liquid terminal operations were added in 1981, while one facility was eliminated. Field storage now totals 22 locations and 212,000 tons.

Manufacturing

Terra operates three manufacturing complexes for the production of nitrogen fertilizer and feed ingredients. The company owns the Port Neal Works south of Sioux City, Iowa and is co-owner of Bison Nitrogen Products Co. and Oklahoma Nitrogen, both at Woodward, Oklahoma.

Manufactured products include nitrogenous fertilizers consisting of ammonia, ammonium nitrate and urea. Emphasis, however, is placed on liquid fertilizers based on urea-ammonium nitrate solutions. Production in 1981 totalled almost 230,000 tons of ammonia at Port Neal and 115,000 tons at Oklahoma Nitrogen. Most of this material was converted to higher value commercial products. Overall, the company produced and shipped about 700,000 tons of product. The combined value of manufacturing goods exceeded \$US63 million.

Natural gas is the major cost factor in manufacturing operations. Gas prices have increased an average of 20% for each of the past several years. A corporate engineering group was formed in 1981 to assess ways to reduce energy consumption. Three major projects involving energy savings — purchase of steam produced from coal, recovery of hydrogen in purge streams and improved converter technology — are planned for installation in 1983 or early 1984, with anticipated savings of 10% in the Port Neal energy bill alone.



SENIOR MANAGEMENT

William T. Dible,
President and Chief Executive Officer
Raymond H. Armor,
Senior Vice President-Finance and Secretary
Lawrence W. Galloway,
Senior Vice President-Corporate Affairs
Paul D. Foster,
Vice President-Retail
James F. Kisela,
Vice President-Personnel
Raymond W. Nason, Jr.,
Vice President-Controller
Charles G. Nevaril,
Vice President-Supply and Distribution
John A. Skinner,
Vice President-Wholesale Sales
James F. Wokosin,
Vice President-Information Systems
John M. Timmons,
Treasurer

FRANCANA OIL & GAS LTD.

Francana Oil & Gas Ltd., a Canadian public company in which Hudson Bay Mining and Smelting Co., Limited owns a majority interest, is directly engaged in the exploration for and development of crude oil and natural gas reserves, and the production and sale of crude oil and natural gas in Canada. Through Trend International Limited, in which Francana Oil & Gas has a 57% interest, and Trend's wholly-owned subsidiary, Trend Exploration Limited, Francana Oil & Gas is involved in exploration and production in the U.S., Canada, Indonesia and elsewhere.

Consolidated net earnings in 1981 amounted to \$13.8 million, compared to \$32.7 million, in 1980. Gross revenue increased to \$141.5 million from \$133.8 million in 1980, and the after-tax cash flow declined to \$49.7 million from \$56.9 million in 1980.

In 1980, the sale of certain gas properties in Western Colorado increased consolidated net earnings and after-tax cash flow (net of income taxes) by \$11.8 million, and \$32.4 million, respectively.



The accompanying table indicates that the percentage of non-Canadian cash flow has increased from 60% in 1980 to 84% in 1981.

The increased revenue for 1981 resulted primarily from higher prices for oil produced in Indonesia and higher interest income from an improved working capital position during most of the period. The decline in earnings in 1981 was due to increased interest expense in the second half of 1981, additional Canadian taxes, a general increase in operating costs and lower production volumes in Canada and Indonesia.

On August 7, 1981, Francana concluded the purchase of 27% of Adobe Oil & Gas Corporation for \$US140.3 million, or \$US32 per Adobe share. Located in Midland, Texas, Adobe has reserves of approximately 46 million equivalent barrels of crude oil. The company also holds 1.7 million net undeveloped acres, one of the largest land holdings of an independent U.S. oil company.

During the year, the company also participated in a large land play in Alabama and during the first month of 1982 sold off a portion of certain East Texas undeveloped properties.

Production and Sales

Daily production from Canadian properties averaged 2,755 barrels of crude oil and 34,270 Mcf of natural gas in 1981 compared with 3,325 barrels and 41,090 Mcf respectively in 1980. Lower production levels in 1981 resulted from lower than expected nominations from the major natural gas purchaser in Alberta and voluntary cutbacks in crude oil production in Saskatchewan to optimize netbacks, together with curtailed purchases of Alberta crude oil for refining. Average Canadian prices received in 1981 were \$18.12 per barrel and \$2.44 per Mcf compared with 1980 prices of \$15.20 per barrel and \$2.35 per Mcf.

Canadian division production income decreased in 1981 largely because of lower than expected nominations from the major gas purchaser and cutbacks in Saskatchewan light crude production.

United States production averaged 1,130 barrels of crude oil and 4,930 Mcf of natural gas per day in 1981 compared with 992 barrels and 3,880 Mcf per day in the previous year. Delays in placing prior years' discoveries on production prevented higher gains from being made in 1981. The average selling prices of crude oil and natural gas in the United States were \$US27.54 per barrel and \$US2.64 per Mcf compared to \$US19.21 per barrel and \$US1.87 per Mcf in 1980. Trend participated in 141 wells during the year compared with 109 wells in 1980.

Trend's share of crude oil production from the Salawati Basin in Indonesia was 3,884 barrels per day in 1981 compared with 4,557 barrels per day in 1980. The lower production rate in 1981 is due to normal reservoir decline and operation of the production-sharing contract. A total of 29 wells were drilled in Indonesia in 1981 and 24 wells were drilled in 1980.

On August 27, 1981, Trend International Limited entered into a new Production-Sharing Contract with Pertamina, the Indonesian State Oil Agency involving a 1.9 million acre area located in South Kalimantan, Indonesia. Trend and its partners have committed to spend \$US21.0 million for exploratory work during the next two years.

Outside Indonesia, Trend holds an 8% interest in a 14.8 million acre block in Paraguay on which an active exploration program is in progress and has submitted an application for an additional prospecting permit in the same sedimentary basin.

Trend plans to significantly increase its participation in new foreign ventures in future years and capital expenditures are scheduled to increase to approximately \$US15.0 million in 1982 compared to \$US8.9 million in 1981. A 20% interest has been acquired in a joint venture in western Egypt, and opportunities in other geographical areas are being actively pursued.

Capital expenditures for land, seismic, drilling and production equipment in

1981 amounted to \$93.3 million compared with \$59 million in the previous year. Of the total, \$52.2 million was invested in the United States, \$29.6 million in Canada and \$11.5 million in Indonesia and other areas.

Reorganization

On February 1, 1982, Francana Oil & Gas Ltd. announced an agreement to proceed with a reorganization under which Sceptre Resources Limited of Calgary will acquire the Canadian operations of Francana and the non-Canadian operations will be acquired by Hudson Bay Mining and Smelting Co., Limited and Minorco.

The reorganization is conditional upon approval by the public shareholders of Francana, by regulatory authorities and by the Court of Queen's Bench, Province of Alberta. It is also conditional upon the receipt of satisfactory assurances from Canadian tax authorities that the reorganization will not result in any Canadian income tax liability to Francana, Hudson Bay Mining or the Canadian public shareholders of Francana.

The combination of Sceptre and Francana will result in a company with significant financial resources and extensive international and domestic exploration exposure. The combined companies established reserves in North America are projected to generate future undiscounted cash flows from proved reserves of more than \$1.5 billion. Combined exploration acreage will total approximately 916,000 net acres in Canada and, in addition, 317,000 net acres in the United States and 1,711,000 net acres in certain other countries, including 543,000 net acres in Abu Dhabi, that are currently held by Sceptre.

As new shareholders of Sceptre, Francana's present public shareholders will participate in benefits available to oil and gas companies having primarily Canadian ownership under Canada's National Energy Program. These benefits have not been available to Francana under its present ownership structure.



Contributions to consolidated net earnings and after-tax cash flow from Francana's Canadian operations and from Trend's United States, Canadian and Indonesian operations.

(\$000)	Net Earnings		After-Tax Cash Flow	
	1981	1980	1981	1980
Francana (Canada only)	\$(1,240)	\$ 7,700	\$ 7,700	\$23,000
Trend (before minority interest)	24,480	22,700	42,020	33,900
Gain on sale of gas properties	—	11,800	—	32,500
	23,240	42,200	\$49,720	\$89,400
Minority interest in Trend	(9,420)	(9,500)		
	\$13,820	\$32,700		

Acreage

At December 31, 1981, Francana, including Trend, held direct interests in 35,647,150 gross and 4,405,517 net acres distributed as follows:

	Gross Acres	Net Acres
Canada		
Western Canada	1,727,423	748,581
Territories and Arctic Islands	282,438	17,362
East Coast Offshore	494,686	74,064
	2,504,547	840,007
United States		
Gulf Coast	326,651	121,977
Mid Continent	62,860	26,722
Rocky Mountain	1,722,133	756,457
Other	306,832	14,313
	2,418,476	919,469
International		
Egypt	1,482,631	296,526
Indonesia	2,155,951	183,780
North Sea	25,176	906
Paraguay	27,060,368	2,164,829
	30,724,126	2,646,041
TOTAL	35,647,150	4,405,517

SENIOR MANAGEMENT

V. Van Sant, Jr.,
Chairman and Chief Executive Officer
R.A. Wasteney,
President and Chief Operating Officer
N.D. Knowles,
Senior Vice President- Operations
E.W. Hayes,
Vice President-Exploration
S.N. Inbusch,
Vice President-Corporate Development and Treasurer
A.J. Williams,
Administrative Vice President and Secretary

Trend Exploration Limited

SENIOR MANAGEMENT

J. Debray,
President and Chief Executive Officer
R.A. Halpin,
Executive Vice President
H.J. Davis,
Senior Vice President-Corporate Development
E. Hardman,
Senior Vice President-Exploration
M. Miles,
Vice President-Finance, Controller and Secretary
D.W. Martin,
Vice President-Engineering
J.L. Redmond,
Vice President-Geology
H.G. Watson,
Vice President-Land
W.J. Magathan,
Vice President-Exploration

INSPIRATION COAL INC.

Inspiration Coal Inc., owned equally by Hudson Bay Mining and Smelting Co., Limited and Minerals and Resources Corporation Limited was formed in November 1980 with the objective of investing in the U.S. coal industry. During 1981, several acquisitions were made to give Inspiration Coal a substantial position in the industry.

Sales in 1981, totalled \$US48.5 million. Net loss after provision for depreciation on the stepped-up asset basis and interest and financing cost was \$US3 million. This included investigation costs and other costs of setting up the operations. There are no comparative results for 1980.

During 1981 the coal division made significant acquisitions of independently owned coal operations. In January, Bailey Mining Company, a producer of low sulphur, low ash premium steam coal, was acquired, retaining the former shareholders as active participants in the local management of the business. In July the Sovereign Coal Group Inc. and its subsidiary Harman Mining Corporation were acquired. Sovereign's production is mostly low sulphur, high fluidity premium coking coals and some high quality steam coals.

On February 5, 1982, the company purchased the Wheelwright coal property abutting the Bailey operation. The purchase places Inspiration Coal in the position of being a major supplier of high grade steam and coking coals to the U.S. and export markets, and the addition of Wheelwright will bring annual production capacity up to more than 4 million tons.

Operating units within the coal group include Sovereign Coal Corporation with mining operations and preparation plants in southeastern Kentucky and Harman Mining Corporation in southwestern Virginia. Bailey Mining Company and Wheelwright operate mines and preparation plants in southeastern Kentucky. Sovereign Pocahontas Company is exclusive sales agent for all units in the coal division.

A further development concerning ICI operations occurred on February 18, 1982, when the company entered into a

letter of intent with a wholly-owned U.S. subsidiary of Compagnie Francaise des Petroles (CFP), contemplating the establishment of a 50-50 joint venture between Inspiration Coal and CFP's U.S. subsidiary to own and operate the company's coal properties.

The U.S. Coal industry had a 71 day strike following the expiration of the National Bituminous Coal Wage Agreement on March 27, 1981. A new Wage Agreement was reached on June 7, 1981. The strike had a severe impact on 1981 earnings throughout the coal industry. The new Wage Agreement, which expires September 30, 1984, provides for an annual increase the first year, and quarterly increases thereafter, in wages and benefits which may have a further negative impact on future earnings unless real price increases can be realized to offset the higher labour costs and other inflationary pressures.

Labour relations in the operating units are generally better than in the industry as a whole, due primarily to the strength of relations and communications between operating management and employees.

Coal prices have remained relatively firm after settlement of the U.M.W.A. strike and should remain strong for 1982 although no real dollar improvement in selling prices is expected in the near future.

Results for 1982 are expected to reflect improvement in operating income over 1981 results. The scheduled opening of several new mines and improvements to existing preparation plants will increase production, with improved levels of



efficiency and quality. This, coupled with an improving price trend for better quality coals and an anticipated increase in demand for U.S. export coals should produce an increase in operating income for 1982.

The target customer base for metallurgical coking coals during 1982 will continue to focus primarily on export sales through major coal exporters. Continuing efforts will be made to expand our market share of domestic metallurgical coal. Most steam coal sales are currently made on a spot basis, but when market conditions appear to be advantageous, efforts will be made to place most of the steam coal business on long-term contracts with provisions for price adjustments.

RESERVES 1981 (tons)	Proven	Probable	Inferred	Total
Harman/Clintwood . . .	24,329,280	866,890	—	25,196,170
Majestic/Sovereign. . .	16,030,260	1,062,633	—	17,092,899
Bailey Mining	8,764,316	3,723,432	369,688	12,857,436
Buckhorn	2,000,000	—	—	2,000,000
Sovereign/ Pocahontas.	50,332,000	16,204,000	—	66,536,000
Total				123,682,505

MARKETING

The Marketing Division was organized in 1980 to maximize benefits to the Corporation in the acquisition of raw materials, marketing of metal production, utilization of terminal markets, and the provision of marketing counsel regarding the Corporation's current and potential businesses. In 1981, the Marketing group was a vital force in selling metals in a depressed market.

Copper

The average N.Y. Commodity Exchange price for copper in 1981 was US79¢ per pound versus US97¢ in 1980. The weak copper price trend during the year reflected softening business conditions in the principal copper consuming sectors, notably the building, automotive and appliance industries. Despite the recession, copper inventories did not increase during the year as they have during previous recessions, due to inventory discipline imposed by high interest rates and production restraint on the part of mining companies. This current, low level of copper stocks, which has undergone a drop of a million tons on a worldwide basis since 1977, is expected to have a significant, positive influence on price during the next general economic recovery.

Copper products are marketed in Canada, the United States, and Europe in the full range of refinery shapes. In addition to sales of company production, other activities in copper include toll refining, toll rod casting, and various forms of physical metal trading. Through switching of delivery points with other suppliers of copper, unit freight costs for Inspiration Copper were reduced by 10% in 1981.

During the year, an agreement was signed with Cable Tech, a Canadian rod and wire company, to toll convert a portion of the company's Canadian copper production into oxygen-free copper rod, a premium product which will be sold to the growing electronics and defense industries.

Zinc

Average North American Produce price for zinc as quoted in *Metals Week* was US44.5¢ in 1981 and US37.4¢ in 1980. For the first nine months of 1981, the

zinc market performed well despite the sluggish economy. However, it turned down sharply in the fourth quarter with sagging automotive and construction demand.

Zinc inventories are not high by historic standards. Stocks held by producers, consumers, and LME warehouses began the year at 785,000 tonnes according to the International Lead Zinc Study group and ended about 825,000 tonnes.

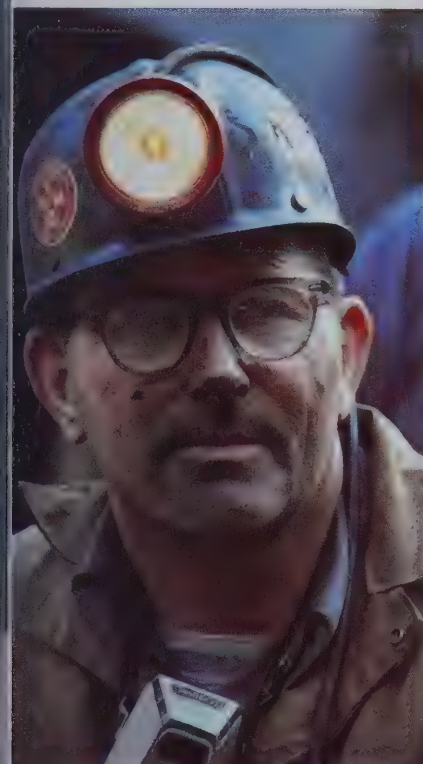
Concentrates were in short supply throughout 1981. This shortage caused a reduction in world metal production, which was more than offset by declining demand. Increasing usage of zinc for rust protection of steel used in the automotive market has been masked by the low volume of production but will become more evident as unit sales rebound. Zinc consumption in North America for galvanizing after fabrication actually increased in 1981 compared to 1980. We expect this important market sector to grow rapidly as the general economy improves.

Precious Metals

Gold and silver prices fell throughout the year with the imposition of high interest rates and declining inflation in most Western World economies. The availability of "real" rates of return above inflation become increasingly attractive to investors seeking a hedge against inflation. COMEX gold prices averaged \$US612 per ounce in 1980. Gold began 1981 at \$US594 and ended the year at \$US399 to average \$US459. COMEX silver prices averaged \$US20.65 per ounce in 1980. Silver began 1981 at \$US16.26 and ended at \$US8.13 to average \$US10.53. The Polish situation gave support to gold and silver prices throughout the year. It became apparent that prices would probably weaken following any resolution. Immediately following the declaration of martial law in Poland, Marketing took the opportunity to sell approximately half of the expected 1982 domestic production of Canadian Metals Division of gold and silver at favourable prices.

Organization

The Division comprises four groups: copper; zinc; mineral economics and



SENIOR MANAGEMENT

R.E. Exum,
President and Chief Executive Officer
O.W. Luginbyhl,
Vice President- Administration
W.G. Henson,
Vice President-Finance
J.E. Nypaver,
Vice President-Operations
Dr. C.L. Sarthou,
Vice President-Marketing
Geoffrey Carter,
Vice President-Planning and Development

market research; finance and administration. The copper group, located in New York City, buys concentrates and markets copper and precious metals produced by both Canadian Metals Division and Inspiration Consolidated Copper. It also manages the terminal market activities. The zinc group, located in Toronto, buys zinc concentrates and markets zinc produced by Canadian Metals Division.

The addition of terminal market activities and the formal establishment of a mineral economics and market research group represent a significant reinforcement of the total marketing effectiveness.

Terminal market activities involve the ability to operate on futures markets such as COMEX in New York (copper, gold and silver) and the LME in London (copper and zinc). Through such activities as hedging, arbitrage trading, and futures trading, the Marketing Division has been able to make a significant contribution to Corporation's earnings.

SENIOR MANAGEMENT

ADMINISTRATION

M.B. O'Shaughnessy,
President

T.F. Shaffer,
Manager, Mineral Economics
and Market Research

W.D. Holden,
Manager, Sales Administration

COPPER GROUP (NEW YORK)

N.S. Young,
Senior Vice President, Copper
and Precious Metals

M.W. Fien,
Vice President, Copper

M.B. Johnson,
Manager, Copper

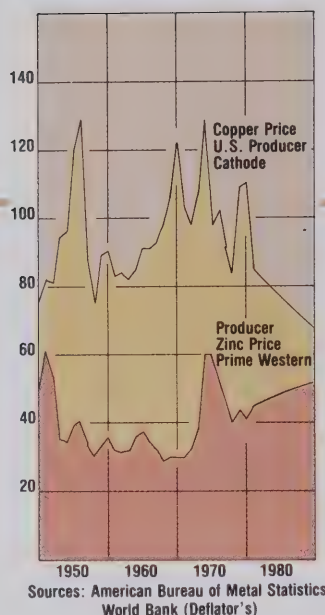
B.E. Disbury,
Vice President, Raw Materials

J. Gross,
Manager, Trading

ZINC GROUP (TORONTO)

J.D. Purvis,
Vice President, Zinc

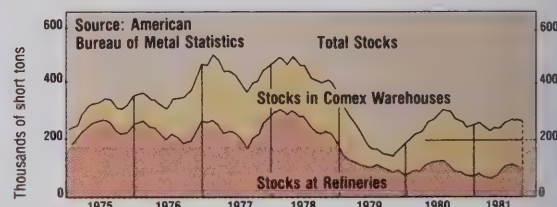
A.G. Bolton,
Manager, Zinc



Metal Price, Constant 1981 U.S. price per pound

Copper Stocks Outside U.S.

Copper Stocks in U.S.



OPERATIONS BY SEGMENT BEFORE MINORITY INTERESTS

(in thousands)

REVENUE	METALS		
	1981	1980	1979
Canadian operations:			
Canada	\$109,508	\$117,105	\$126,315
Export — United States	146,883	163,589	118,775
Export — Europe	35,556	28,223	26,430
Foreign operations:			
United States	—	—	—
Southeast Asia	—	—	—
Net sales	291,947	308,917	271,520
Interest income:			
Canada	426	122	107
United States/Europe	—	—	—
Other income	11,901	13,275	(607)
TOTAL REVENUE	\$304,274	\$322,314	\$271,020

OPERATING PROFIT (LOSS)

Canada	\$ (5,153)	\$ 40,855	\$ 30,888
United States	—	—	—
Southeast Asia	—	—	—
	<u>\$ (5,153)</u>	<u>\$ 40,855</u>	<u>\$ 30,888</u>

Other corporate revenue (expense) . . .

General corporate expenses

Interest expense

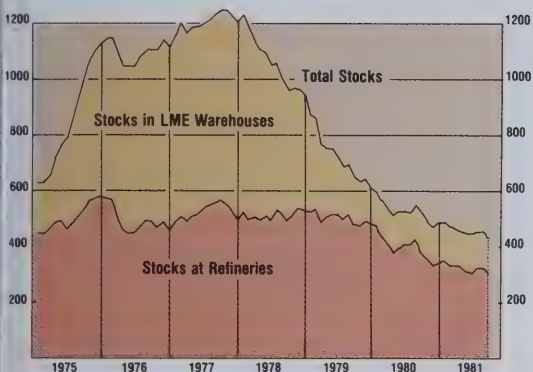
Earnings from operations before taxes

IDENTIFIABLE ASSETS

Canada	\$350,054	\$279,470	\$267,823
United States	39,880	47,434	57,917
Southeast Asia	—	—	—
Total identifiable assets	\$389,934	\$326,904	\$325,740

Depreciation, depletion and amortization expense

Capital expenditures



PETROLEUM			CORPORATE			CONSOLIDATED		
1981	1980	1979	1981	1980	1979	1981	1980	1979
46,657	\$ 51,939	\$ 42,672	\$ —	\$ —	\$ —	\$156,165	\$169,044	\$168,987
—	—	—	—	—	—	146,883	163,589	118,775
—	—	—	—	—	—	35,556	28,223	26,430
16,679	9,965	7,986	—	—	—	16,679	9,965	7,986
64,687	63,070	43,026	—	—	—	64,687	63,070	43,026
128,023	124,974	93,684	—	—	—	419,970	433,891	365,204
2,926	947	1,069	7,700	11,246	7,099	11,052	12,315	8,275
2,932	2,283	1,798	—	366	—	2,932	2,649	1,798
1,223	21,833	3,656	972	(1,481)	1,054	14,096	33,627	4,103
135,104	\$150,037	\$100,207	\$ 8,672	\$ 10,131	\$ 8,153	\$448,050	\$482,482	\$379,380
30,825	\$ 38,890	\$ 27,946	\$ 7,700	\$ 11,246	\$ 7,099	\$ 33,372	\$ 90,991	\$ 65,933
(1,386)	20,311	2,399	—	366	—	(1,386)	20,677	2,399
49,558	41,845	28,524	—	—	—	49,558	41,845	28,524
78,997	\$101,046	\$ 58,869	\$ 7,700	\$ 11,612	\$ 7,099	81,544	153,513	96,856
						972	(1,481)	1,054
						(5,703)	(8,485)	(4,992)
						(23,802)	(11,383)	(11,073)
						\$ 53,011	\$132,164	\$ 81,845
135,703	\$132,373	\$106,240	\$ 25,589	\$ 96,198	\$ 56,999	\$511,346	\$508,041	\$431,064
311,942	85,119	60,511	59,596	51,513	41,537	411,418	184,066	159,965
28,135	29,224	29,245	—	—	—	28,135	29,224	29,245
475,780	\$246,716	\$195,996	\$ 85,185	\$147,711	\$ 98,536	\$950,899	\$721,331	\$620,274
25,540	\$ 20,858	\$ 18,096	\$ 247	\$ 480	\$ 236	\$ 53,092	\$ 44,588	\$ 38,914
93,008	\$ 45,573	\$ 42,348	\$ 300	\$ 3,022	\$ 89	\$171,936	\$ 79,152	\$ 78,706



CONSOLIDATED FINANCIAL STATEMENTS

December 31, 1981

CONTENTS

Management's Report to Shareholders	24
Auditors' Report	24
Management's Discussion of the Financial Statements	25
Consolidated Statement of Earnings	28
Consolidated Statement of Retained Earnings	28
Consolidated Statement of Changes in Financial Position	29
Consolidated Statement of Financial Position	30
Notes to the Consolidated Financial Statements	31
Supplementary Petroleum Information	38
Selected Financial Data	42

MANAGEMENT'S REPORT TO THE SHAREHOLDERS



The financial statements of the Company have been prepared by management in accordance with generally accepted accounting principles consistently applied. Effective June 30, 1981, Terra Chemicals International, Inc. ceased to be a consolidated subsidiary following its reorganization with Plateau Holdings Inc., an associated company. These financial statements have been restated throughout to reflect Terra as an associate.

The activities of two of the Company's principal operating entities, Canadian Metals Division and Francana Oil & Gas Ltd., together with Francana's 57% owned consolidated subsidiary, Trend International Limited, are reported on a fully consolidated basis. Plateau Holdings Inc.'s three principal operating entities, Inspiration Coal Inc., Inspiration Consolidated Copper Company and Terra Chemicals International, Inc., are included on an equity accounting associated company basis.

The impact of subsequent events disclosed in Note 15, if these agreements are completed, would materially affect Inspiration Coal Inc. and Francana Oil & Gas Ltd. and would substantially change the Company's future consolidated financial statements and operations.

Because a precise determination of many assets and liabilities is dependent upon future events, the preparation of periodic financial statements necessarily involves the use of estimates and approximations. These have been made using careful judgement and with all information available up to February 19, 1982. The financial statements have, in management's opinion, been properly prepared within reasonable limits of materiality and within the framework of the accounting policies summarized in Note 1 of the notes to the financial statements.

D.W. Perks, *Chief Financial Officer, Vice-President, Finance and Treasurer.*

AUDITORS' REPORT

To the shareholders of Hudson Bay Mining and Smelting Co., Limited:

We have examined the consolidated statement of financial position of Hudson Bay Mining and Smelting Co., Limited as at December 31, 1981 and 1980, and the consolidated statements of earnings, retained earnings and changes in financial position for each of the three years in the period ended December 31, 1981. Our examinations were made in accordance with auditing standards generally accepted in Canada, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at December 31, 1981 and 1980, and the results of its operations and the changes in its financial position for each of the three years in the period ended December 31, 1981 in accordance with accounting principles generally accepted in Canada applied on a consistent basis, after restatement of the consolidated financial statements for the years 1980 and 1979 as explained in Note 1.

Deloitte Haskins + Sells
Chartered Accountants

*Toronto, Canada
February 19, 1982*

MANAGEMENT'S DISCUSSION OF THE FINANCIAL STATEMENTS

Acquisitions, divestitures, and other changes in the Company's ownership of its operating units which were completed in 1981 or have been agreed to in principle in early 1982, have significantly increased the overall focus of the Company's activities on the Plateau Group which is equally owned with Minorco. The Plateau Group is consolidated for United States tax purposes. The macro effects of these changes on the financial statements is discussed in Management's report to the shareholders. The 1982 agreements, if completed, would reorganize the assets and ownership of Francana Oil & Gas whereby the Company and Minorco would acquire the non-Canadian assets and Sceptre Resources Limited would acquire the Canadian assets and a portion of the long-term debt. In addition, the coal joint venture with Compagnie Francaise des Petroles would reduce the financing required in 1983 which arose on the acquisition of the coal assets during 1981.

During 1981, the Company transferred to the Plateau Group its 54% interest in Terra Chemicals and Minorco contributed an equivalent amount of cash. A portion of the cash was used to purchase the remaining 46% minority interest in Terra Chemicals. The balance, together with \$US118 million in 9% notes taken back by the vendors of the Sovereign and Harman coal companies, \$US26 million in excess liquid assets acquired in the Sovereign and Harman acquisition over cash paid to the vendors and further Plateau shareholders' contributions of \$US17.7 million was used to create a coal division with capitalization of \$US104 million; advance \$US16.6 million to Inspiration Copper in loans and \$US19.5 million in capital; cover Plateau corporate expenses and retain a year-end corporate cash and short-term deposit position of \$US8.5 million.

Highlights

The dramatic shift from record 1980 sales and earnings to a loss of \$10.8 million for 1981 was due to metal segment losses of \$27.5 million brought about by declining metal prices and continuing inflation of production costs.

Petroleum prices improved again in 1981 but not enough to offset the effect of increasing interest rates on higher levels of debt within both Francana Oil & Gas and the Plateau Group.

As described in the notes to the financial statements, the interim payment of \$39.5 million received for the plant and ancillary assets of the power facility at Island Falls was not included in 1981 earnings because of uncertainty as to the final settlement. It will be treated as an extraordinary item when recognized as income.

Operating results deteriorated in each succeeding quarter except in the second quarter which included the principal sales months of Terra Chemicals' agricultural lines. There were a number of nonrecurring operating gains in 1981. Canadian Metals Division and Inspiration Copper contributed a net gain of \$3.5 million on forward sales of copper over the first two quarters; prior years' Tom Valley project exploration expenditures of \$4 million were capitalized in the second quarter and Inspiration Copper sold the Ferron Canyon coal properties in the third quarter for a net contribution of \$6.2 million.

Dividends

Dividend payments of \$10.6 million, \$1.05 per share, were made in 1981 which compared to \$12.1 million or \$1.20 per share in 1980 and \$8.1 million or 80 cents per share in 1979. Payments have been made quarterly, increasing in the fourth quarter of 1979 to the rate of 30 cents per share, which held until the fourth quarter of 1981, at which time the rate was reduced to 15 cents per share. Dividends payable to nonresidents of Canada are subject to withholding taxes. Regularly, the Board of Directors reviews the Company's financial position, its operating results and considers future developments and opportunities. In light of these factors, the Board establishes dividend declarations.

Liquidity

The Company experienced a rapid growth in assets in 1981 as a result of the purchase of the 27% interest in Adobe Oil & Gas Corporation and the dramatic

increase in capital spending to \$171.9 million from the 1980 and 1979 levels of approximately \$79 million. A major portion of the capital spending resulted from higher petroleum exploration activity in the U.S. and increased petroleum lease acquisitions in Canada, the U.S. and internationally as well as new mine development at Spruce Point, Rod and Trout Lake in the Flin Flon/Snow Lake operations. This expansion was accomplished without additional equity financing by the utilization of \$95 million of cash and short-term deposits; new long-term debt of \$190.6 million and working capital flows from deferred income and operating sources of \$111.1 million in 1981.

The petroleum segment has principally been able to finance its operations and capital expenditures through internally generated funds while continuing to maintain an adequate working capital position. Because of the nature of the oil and gas business, the petroleum segment is able to match with reasonable accuracy its revenues and expenditures. The majority of the segments' sales are made under fixed term, often take-or-pay, contracts to major customers and consequently are quite predictable while cash outlays, primarily for drilling activity, are budgeted annually.

To provide for adequate short-term cash resources and in view of the current depressed metal markets and high interest rates, the Company has secured additional long-term lines of credit totalling \$136 million with banks in Canada and the U.S. and has curtailed operating and capital expenditures to conserve cash. In February, 1982, an agreement to reorganize Francana Oil & Gas Ltd. was signed (see Note 15 (c) to the financial statements) whereby the non-Canadian assets will be retained by the Company and Minorco, while the Canadian operations will be transferred to Sceptre Resources Limited along with petroleum debt of \$107 million. While no final decision has been made, it is presently contemplated that the Company and Minorco will at some future date rearrange their shareholdings in the non-Canadian assets so as to be approximately equal.

MANAGEMENT'S DISCUSSION OF THE FINANCIAL STATEMENTS (continued)

As discussed above, Plateau Group, owned equally by the Company and Minorco, also experienced a rapid growth in assets in 1981 as the direct result of the acquisition of Terra Chemicals and the coal division. The Plateau Group was well positioned at the end of 1981 with working capital of \$US114.2 million and unused lines of credit of \$US65 million.

If metal segment prices continue at the current depressed levels, further elimination or deferral of major capital expenditures will be necessary.

Taxes

The overall effective income tax rate was 59% in 1981 due to the predominance of petroleum segment earnings contributions. In 1980, tax expense increased by approximately \$20 million most of which was payable currently. The 1981 losses have resulted in a projected recovery of \$5.5 million of the 1980 current tax expense. In 1980, and to a lesser extent in 1979, there was a considerable utilization of prior years' tax losses and investment tax credits.

Plateau Group incurred substantial operating losses in 1981 and 1980. As a result, it has available \$US70.5 million of reductions from future years taxable income and \$US9.8 million of investment tax credits which cannot be utilized while in a loss carry forward position. The Company's share of Plateau's total losses reflect no benefit from future tax reductions, however when they are utilized, these benefits will be reported as an extraordinary item.

1981 Compared With 1980

Consolidated net sales decreased by 3% as a direct result of depressed metal prices offset slightly by higher sales for petroleum products. Although copper production set a new annual production record in the Canadian Metals Division, disappointing sales volumes and prices contributed to the 5% decrease in metals' net sales. The weak copper price trend during the year reflected softening business conditions in the principal copper consuming sectors, notably the building, automotive and appliance

industries. The average 1981 price of zinc increased by 9% over the average 1980 price, however the price turned down sharply in the fourth quarter of 1981 with sagging automotive and construction demand. Zinc production was lower in 1981 as a direct result of purchased concentrate shortages. Gold and silver prices also declined throughout 1981, a trend which has continued into the early months of 1982. In January, 1982, the Company committed itself to sell approximately half of the expected 1982 Canadian Metals Division production of gold and silver at favourable prices. Petroleum net sales increased 2% as higher revenues from the sale of crude oil in Indonesia (as determined by the production-sharing agreement) and the U.S., and natural gas in the U.S. more than offset lower revenues from the sale of natural gas in Canada. Despite a decline in 1981 Indonesian crude oil production of 15%, net sales increased 3%. The price of crude oil averaged \$US35 per barrel in 1981 compared to \$US32 per barrel in 1980. U.S. production of crude oil increased by nearly 50%, natural gas by 225%, while prices of both products increased 43% and 41% respectively, from 1980 levels. Production of crude oil and natural gas in Canada was reduced by approximately 17% during 1981. The lower production of natural gas was due to lower nominations by the major purchaser based on a surplus in the marketplace. The reduced production of Canadian crude oil resulted from voluntary cutbacks of Saskatchewan crude oil in response to the National Energy Program and the Alberta government cutback of shipments of crude oil.

Interest and other income decreased in 1981 by 42% although this was somewhat exaggerated due to a sale of natural gas properties which accounted for \$18.9 million in income in 1980. Interest income decreased by \$1 million from 1980 as the high short-term rates during 1981 were more than offset by the lower cash position of the Company. Whitehorse Copper joint venture earnings decreased \$4.1 million from the 1980 record levels, mainly as the result

of low copper prices in 1981. The Company recorded a \$3.2 million gain on forward copper sales in the first half of 1981 which did not occur in 1980.

Consolidated cost of sales for 1981 increased by 10% over 1980. Operating costs in the Canadian Metals Division continued to escalate during 1981 due to higher than normal increases in the cost of labour, energy and supplies. Increased energy costs were directly associated with sale of the Island Falls power plant on April 1, 1981. External power requirements for the Company's Flin Flon/Snow Lake operations are now supplied by Manitoba Hydro at substantially increased costs. Petroleum costs increased due primarily to the higher production levels in the U.S.; the fixed nature of costs associated with Canadian natural gas production and the general effects of inflation. The installation of larger pumps and increased transportation and fuel costs increased Indonesian costs by 12%. Depreciation, depletion and amortization increased by 19% as a result of capital expenditures which increased the cost per unit-of-production.

Exploration expenses decreased substantially, to \$3.9 million, mainly as the result of the capitalization of the Tom Valley project during 1981. It was determined that this project had entered the pre-development stage, and according to the Company's accounting policy, \$4 million of prior years' expenditures were credited to earnings in 1981. Interest expense more than doubled from 1980 to 1981, almost entirely due to the bank debt of \$US140 million incurred by Francana Oil & Gas to purchase its 27% equity interest in Adobe Oil & Gas Corporation.

The consolidated tax provision decreased from \$66.1 million in 1980 to \$37.6 million in 1981 although the effective tax rate increased from 41% to 59%. Lower 1981 earnings before taxes in the petroleum segment, 1981 operating losses in the metals segment versus 1980 profits and \$3 million in 1981 of petroleum and gas revenue tax, as part of the Canadian

government's National Energy Program, all contributed to the swing from one year to the next.

Share of losses of associated companies increased to \$10.7 million in 1981 from \$1 million in 1980. Inspiration Copper was the major contributor to losses for both years as a four-month strike affected 1980 results and 1981 suffered from poor copper sales due to weak demand and continuing low prices. Inspiration Copper's 1981 loss was exacerbated by low silver and gold selling prices and high interest charges. The 1981 results did include a gain of \$6.2 million, being the Company's share of Inspiration Copper's \$US10.4 million gain on sale of the Ferron Canyon coal properties in Utah. Inspiration Coal began operations in 1981 with the purchase of Bailey Mining, Sovereign Coal Group and Harman Mining. The Company's share of coal group losses was \$1.8 million as high borrowing costs and depreciation charges based on the stepped up asset values more than offset satisfactory operating income. The Company's share of earnings of Terra Chemicals decreased from \$7.1 million in 1980 to \$5 million in 1981 as fertilizer price increases did not keep up with the rate of cost increases in 1981. Fertilizer sales were down from 1980, however sales of agricultural chemicals increased by 37% in 1981. Tantalum Mining Corporation experienced a slow 1981 as markets softened dramatically for its product. The Company's share of Tantalum's earnings was \$2.9 million in both years.

There were no extraordinary items in 1981 while in 1980 the Company recorded a gain of \$19.5 million on the sale of its shares in Rosario Resources and recorded the application of tax losses carried forward of \$2.2 million.

1980 Compared With 1979

Consolidated net sales increased by 19% to \$434 million from \$365 million in 1979. Higher prices for all products accounted for this increase, while sales volumes were lower. Metal sales increased by 14% which was attributable to higher unit selling prices for all metals, particularly gold price increases which added \$25.3 million in revenues. Over

half of the metal sales volumes in both years was derived from the sale of metal produced from concentrates purchased from other mines at prices which related to current market less treatment fees. Copper and, to a lesser extent, zinc producer prices during 1980 were changed frequently and maintained a close relationship to the commodity exchange prices. Petroleum sales increased to \$125 million in 1980, an increase of 33% from 1979, primarily because OPEC crude oil price increases more than offset a 12% reduction in production from Trend's Indonesian production-sharing contract and a decline in Canadian natural gas production.

Other income increased in 1980 by \$34.4 million including \$18.9 million from a sale of natural gas properties. Whitehorse Copper joint venture earnings increased by \$5.3 million resulting from higher production and metal prices, and interest earned on short-term deposits increased by \$4.9 million from higher cash flows and higher interest rates. During 1979 the cost of closing gold sale commitments reduced other income by \$8.5 million.

Consolidated cost of sales for 1980 increased by 17% over 1979 as a result of higher labour, material and energy costs combined with increased volumes. However, gross margins improved as production costs did not rise as much as selling prices. Depreciation, depletion and amortization increased by 15% as a result of increased unit-of-production write-off rates.

Exploration expenditures of \$9.7 million represented an increase of 126% over 1979. Exploration activities increased during the year, principally on the Tom Valley project in the Yukon, and two previously investigated properties were written off.

Taxes increased to \$66.1 million in 1980 from \$46.1 million in the previous year and reflect higher earnings before taxes partially offset by a lower effective tax rate.

Share of losses of associated companies in 1980 totalled \$1 million compared to earnings of \$4.7 million in 1979, as

Inspiration Copper experienced a four month strike, related shut-down costs and otherwise lower production levels of finished copper than 1979. During the year, Inspiration incurred higher interest costs from new borrowings to finance capital expenditure programs to improve its operating efficiencies. Terra Chemicals experienced a record year as improved operations, strong demand for most of its products and more favourable selling prices all contributed to substantial earnings increases in which the Company's share increased seven times from 1979 levels to \$7.1 million in 1980. Tantalum Mining Corporation enjoyed greatly increased selling prices in 1980 and the Company's share of its earnings increased by \$1.3 million to \$2.9 million in 1980.



CONSOLIDATED STATEMENT OF EARNINGS *For the years ended December 31, 1981, 1980 and 1979*

	1981	1980	1979
	<i>(in thousands)</i>		
Revenues:			
Net sales	\$419,970	\$433,891	\$365,204
Interest and other income (Note 11)	28,080	48,591	14,176
	<u>448,050</u>	<u>482,482</u>	<u>379,380</u>
Costs and expenses:			
Cost of sales	297,892	269,923	230,352
Depreciation, depletion and amortization	53,092	44,588	38,914
Exploration expenses	3,865	9,701	4,285
General administrative expenses	16,388	14,723	12,911
Interest	23,802	11,383	11,073
	<u>395,039</u>	<u>350,318</u>	<u>297,535</u>
Earnings before the undernoted items	53,011	132,164	81,845
Income taxes, mining taxes and royalties (Note 12)	37,601	66,096	46,014
Earnings from operations	<u>15,410</u>	<u>66,068</u>	<u>35,831</u>
Deduct:			
Minority interest in earnings of subsidiaries	15,434	23,657	12,088
Share of losses (earnings) of associated companies (Note 3)	10,729	970	(4,652)
	<u>26,163</u>	<u>24,627</u>	<u>7,436</u>
Earnings (loss) before extraordinary items	<u>(10,753)</u>	<u>41,441</u>	<u>28,395</u>
Extraordinary items:			
Gain on sale of investment (Note 13)	—	19,500	—
Application of tax losses carried forward	—	2,167	3,221
Net earnings (loss) for the year	<u>\$ (10,753)</u>	<u>\$ 63,108</u>	<u>\$ 31,616</u>
Earnings (loss) per share (Note 10):			
Before extraordinary items	\$ (1.06)	\$ 4.10	\$ 2.81
After extraordinary items	<u>\$ (1.06)</u>	<u>\$ 6.25</u>	<u>\$ 3.13</u>

CONSOLIDATED STATEMENT OF RETAINED EARNINGS *For the years ended December 31, 1981, 1980 and 1979*

	1981	1980	1979
	<i>(in thousands)</i>		
Retained earnings at beginning of the year	\$265,409	\$214,423	\$190,888
Net earnings (loss) for the year	(10,753)	63,108	31,616
	<u>254,656</u>	<u>277,531</u>	<u>222,504</u>
Dividends (per share 1981 - \$1.05; 1980 - \$1.20; 1979 - \$0.80)	10,607	12,122	8,081
Retained earnings at end of the year	<u>\$244,049</u>	<u>\$265,409</u>	<u>\$214,423</u>

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION *For the years ended December 31, 1981, 1980 and 1979*

	1981	1980	1979
	<i>(in thousands)</i>		
Working capital provided:			
Operations:			
Earnings from operations	\$ 15,410	\$ 66,068	\$ 35,831
Depreciation, depletion and amortization	53,092	44,588	38,914
Deferred taxes	2,899	16,755	15,104
Dividends from associated companies (Note 3)	2,975	5,719	1,785
Other	338	1,620	(1,023)
	74,714	134,750	90,611
Deferred income	36,396	6,940	1,919
Issue of shares to minority interests	13,900	—	—
Proceeds from long-term debt	190,614	—	4,417
Proceeds on sale of investments (Note 13)	—	47,848	1,010
	315,624	189,538	97,957
Working capital applied:			
Dividends	10,607	12,122	8,081
Dividends paid to minority interests	465	4,572	4,529
Investment in associated companies (Note 3)	14,145	2,286	17,855
Other investments (Note 4)	179,720	2,530	25,462
Property, plant and equipment	171,936	79,152	78,706
Reduction of long-term debt	3,405	23,807	2,194
Increase in other assets	9,232	6,287	1,661
	389,510	130,756	138,488
Increase (decrease) in working capital	(73,886)	58,782	(40,531)
Working capital at beginning of the year	135,522	76,740	117,271
Working capital at end of the year	\$ 61,636	\$135,522	\$ 76,740
Changes in working capital represented by:			
Increase (decrease) in current assets:			
Cash	\$ 4,755	\$ (937)	\$ 3,384
Short-term deposits	(99,830)	71,994	(47,175)
Accounts receivable	3,430	(608)	17,298
Inventories	14,398	16,865	5,036
Income taxes recoverable	—	—	(4,329)
	(77,247)	87,314	(25,786)
(Increase) decrease in current liabilities:			
Short-term borrowings	(8,747)	307	2,829
Accounts payable and accrued liabilities	(1,539)	(14,124)	(20,515)
Income and other taxes payable	12,199	(11,267)	2,883
Current portion of long-term debt	1,448	(3,448)	58
	3,361	(28,532)	(14,745)
Increase (decrease) in working capital	\$(73,886)	\$ 58,782	\$(40,531)


See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION *As at December 31, 1981 and 1980*

	1981	1980
	<i>(in thousands)</i>	
Current assets:		
Cash	\$ 8,233	\$ 3,478
Short-term deposits	16,131	115,961
Accounts receivable	54,001	50,571
Inventories	85,816	71,418
Total current assets	164,181	241,428
Deduct:		
Current liabilities:		
Short-term borrowings (Note 6)	10,355	1,608
Accounts payable and accrued liabilities	87,705	86,166
Income and other taxes payable	1,940	14,139
Current portion of long-term debt	2,545	3,993
Total current liabilities	102,545	105,906
Working capital	61,636	135,522
Add:		
Investment in associated companies (Note 3)	101,737	102,378
Other investments (Note 4)	192,143	12,763
Property, plant and equipment (Note 7)	457,962	339,118
Other assets	34,876	25,644
Capital employed	848,354	615,425
Deduct:		
Commitments and contingencies (Note 8)		
Long-term debt (Note 9)	254,845	67,636
Deferred income (Note 8)	47,138	10,742
Deferred taxes	116,440	113,564
Minority interest in subsidiaries	114,635	86,827
	533,058	278,769
Shareholders' investment	\$315,296	\$336,656
Investment represented by:		
Share capital (Note 10)	\$ 71,247	\$ 71,247
Retained earnings	244,049	265,409
Total shareholders' investment	\$315,296	\$336,656

Approved by the Board of Directors

Director: E.P. Gush



Director: A.T. Lambert



See accompanying notes to the consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Generally accepted accounting principles:

The financial statements are prepared in conformity with accounting principles generally accepted in Canada.

Principles of consolidation:

The consolidated financial statements include the accounts of Hudson Bay Mining and Smelting Co., Limited and all companies more than 50%-owned. In addition, the Company follows the equity method of accounting for its interest in associated companies in which it owns from 20% to 50% of the common shares and exercises a significant influence.

The Company's interest in Terra Chemicals International, Inc. was reduced from approximately 54% to 50% of the outstanding common shares effective June 1981, following a cash merger transaction with Plateau Holdings Inc., an associated company (see Note 2). For purposes of comparison, the 1980 and 1979 consolidated financial statements have been restated to account for Terra as an associated company. While assets, liabilities, revenues and costs are restated, net earnings, earnings per share and retained earnings for those years did not change as a result of the restatement.

Inventories, materials and supplies:

Inventories consist substantially of metals and metal products. Metals and all other saleable products are valued at the lower of cost or estimated net realizable value; metal by-products are valued at estimated net realizable value. Materials and supplies are valued at cost. Cost is determined on the first-in, first-out basis.

Property, plant and equipment:

Mineral properties - Exploration costs with respect to mines operating, or in the development stage, are capitalized as mineral properties and amortized by the unit-of-production method based on estimated recoverable reserves; all other mineral exploration costs are written off to expense as incurred; expenditures for projects deemed commercially productive are capitalized with a corresponding credit to earnings at the time this determination is made.

Mine development expenditures - Expenditures on major mine development are capitalized and amortized by the unit-of-production method for each mine based on related estimated recoverable reserves.

Petroleum properties - Petroleum properties are accounted for on the full-cost basis whereby all costs relating to the exploration for, and the development of, petroleum resources, whether productive or nonproductive, are capitalized within cost centres, by country, and amortized by the unit-of-production method based on estimated recoverable reserves of producing properties.

Plant and equipment - Expenditures for plant and equipment additions, major replacements and improvements are capitalized in the property accounts; the

cost of maintenance and repairs is charged to operating expense as incurred. Depreciation of mineral and petroleum plant and equipment is charged to operations by the unit-of-production method based on estimated recoverable reserves. Depreciation of other plant and equipment is charged to operations, generally on a straight-line basis over their estimated useful lives.

Income and mining taxes:

The Company follows the tax allocation method of providing for income and mining taxes. Deferred taxes represent primarily tax reductions for expenditures on mine development, petroleum and other properties and depreciation deducted in the determination of taxable income but not yet charged to earnings. Investment tax credits are recorded when utilized.

Foreign currency translation:

The financial statements are expressed in Canadian dollars. Foreign currencies have been translated into Canadian dollars as follows: revenue, costs and expenses of foreign subsidiaries at the average rates of exchange for the period; noncurrent assets (including depreciation, depletion and amortization thereof) and noncurrent liabilities at rates in effect at dates of transactions; current assets and current liabilities at rates in effect at the end of the year. Gains and losses on currency translation are included in the statement of earnings.

2. RELATED PARTY INFORMATION

(refer to chart on page 5)

The Company, through its major (44%) shareholder, Minorco Canada Limited (Mincan) is associated with Minerals and Resources Corporation Limited (Minorco), which owns 100% of Mincan. Minorco and the Company equally own Plateau Holdings Inc., a U.S. holding company, which in turn owns, directly and indirectly, all of the common stock of Bailey Mining Co., Inc., Harman Mining Corporation, Inspiration Coal Inc., Inspiration Mines Inc., Inspiration Consolidated Copper Company, Sovereign Coal Group Inc. and Terra Chemicals International, Inc.

Francona Oil & Gas Ltd., a subsidiary, 58% owned by the Company and 17% owned by Mincan, owns 57% of Trend International Limited with the balance being owned by Minorco. Dividends paid by Trend to Minorco were \$465,000 in 1981; \$4,295,000 in 1980; \$4,309,000 in 1979.

The Company provides administrative services in Toronto to certain Plateau Holdings and Mincan group companies, some of which are joint venture partners with the Company in some exploration projects. The applicable costs are shared on a time or activity basis amongst the parties involved without any profit element.

The Company and Mincan equally own a company, Ambay Services Limited, that handles the surplus funds, cash requirements and money market activities of certain related companies, at relevant market rates. The amount which the

NOTES continued

Company had on deposit with Ambay fluctuated during the year with the maximum amount being \$92,076,000; 1980 — \$100,417,000; 1979 — \$86,884,000; and the amount at December 31, 1981 was \$6,788,000; December 31, 1980 — \$79,070,000. The Company earned interest of \$7,312,000 on these deposits in 1981; \$11,002,000 in 1980; \$6,962,000 in 1979.

Ambay advances to the Mincan group fluctuated during the year with the maximum amount being \$23,412,000; 1980 — \$24,032,000; 1979 — \$867,000 and the amount at December 31, 1981 was \$5,000; 1980 — \$21,277,000.

The Company has a two-thirds interest in, and is manager of, a joint venture to operate the Whitehorse Copper mine; Mincan has the remaining one-third interest. The Company buys all of the concentrate produced by the joint venture at market prices for the metal contained and charges the joint venture for refining and marketing the metal. The Company purchased 26,230 tons of concentrate for \$32,172,000 net of refining and marketing charges in 1981; 20,535 tons for \$31,973,000 in 1980; 21,862 tons for \$23,491,000 in 1979; and received \$1,200,000 as a depreciation charge and \$6,657,000 on account of profit in 1981; \$1,200,000 and \$10,788,000 respectively in 1980; \$1,191,000 and \$5,439,000 respectively in 1979.

3. INVESTMENT IN ASSOCIATED COMPANIES

A significant portion of the operations of the Company are conducted through associated companies, mainly owned in conjunction with Minorco (Note 2). As a result of the considerable degree of debt financing within the coal operations, the Company's investment in the Plateau Group is essentially the carry forward of the previous investment in Inspiration Consolidated Copper Company and Terra Chemicals International, Inc.

	% of common share ownership			
Total investments:	1981	1980	1981	1980
	<i>(in thousands)</i>			
Plateau Group (with Minorco)	50.0%	50.0%	\$ 89,490	\$ 43,701
Terra Chemicals International, Inc. (see note below)	—	55.3%	—	45,986
Tantalum Mining Corporation of Canada Limited	37.5%	37.5%	6,476	5,228
Other companies			104	104
Equity in net assets			96,070	95,019
Advances			(2,381)	(1,875)
Unamortized excess of cost of investments over equity in net assets			8,048	9,234
			<u>\$101,737</u>	<u>\$102,378</u>

Share of earnings (losses):	1981	1980	1979
	<i>(in thousands)</i>		
Plateau Group			
Inspiration Coal Inc.	\$ (1,841)	\$ —	\$ —
Inspiration Consolidated Copper Company	(13,511)	(10,950)	2,047
Inspiration Mines Inc.	(1,905)	—	—
Terra Chemicals International, Inc.	5,012	—	—
Plateau Holdings Inc. and other	(1,403)	(26)	—
Terra Chemicals International, Inc. (see note below)	—	7,134	1,028
Tantalum Mining Corporation of Canada Limited	2,919	2,885	1,563
Other	—	(13)	14
	<u>\$ (10,729)</u>	<u>\$ (970)</u>	<u>\$ 4,652</u>

Dividends received:	1981	1980	1979
	<i>(in thousands)</i>		
Plateau Group (Terra Chemicals: pre-acquisition) . .	\$ 1,100	\$ —	\$ —
Terra Chemicals International, Inc. (see note below)	—	1,594	1,672
Tantalum Mining Corporation of Canada Limited	1,875	4,125	113
	<u>\$ 2,975</u>	<u>\$ 5,719</u>	<u>\$ 1,785</u>

Changes in investment positions:	1981	1980	1979
	<i>(in thousands)</i>		
Plateau Group			
Inspiration Coal Inc.	\$ 5,247	\$ —	\$ —
Inspiration Consolidated Copper Company	6,988	128	16,380
Inspiration Mines Inc.	488	—	—
Terra Chemicals International, Inc. (see note below)	—	1,034	1,475
Net investment in subsidiary companies	1,422	1,124	—
	<u>\$ 14,145</u>	<u>\$ 2,286</u>	<u>\$ 17,855</u>

The Company's interest in Terra Chemicals International, Inc. was reduced from approximately 54% to 50% of the outstanding common shares effective June 30, 1981, following a cash merger transaction with Plateau Holdings Inc. Plateau acquired 100% of the common stock outstanding and 63% of the preferred stock outstanding of Terra for a total consideration of \$US120,227,000 of which approximately \$US69,080,000 related to the common and preferred stock previously owned by the Company. This transaction has been treated as a reorganization and accordingly did not result in any disposition gain or loss. The consolidated financial statements have been restated to include the investment in Terra as a separate associated company for 1979 and 1980 and as part of Plateau Group for 1981.

During the year, Plateau Holdings Inc. completed the following additional acquisitions:

(a) Effective January 1, 1981, Plateau acquired 100% of the common stock outstanding of Bailey Mining Co., Inc., a coal mining operation, of Bypro, Kentucky for a purchase price of \$US250,000 and subsequent advances of \$US8,310,000, which exceeded Plateau's equity in the underlying net assets by \$US2,697,000.

(b) Effective July 8, 1981, Plateau acquired 100% of the common stock outstanding of the Sovereign Coal Group Inc., of Bluefield, West Virginia and its associated company, Harman Mining Corporation of Harman, Virginia. Total cost of the acquisition was approximately \$US151,602,000 including redundant working capital of \$US59,602,000 for a net cost attributable to coal assets of \$US92,000,000. A portion of the redundant assets was used to fund the purchase, with the balance of the acquisition being financed by notes to the vendors. The cost exceeded Plateau's equity in the underlying net assets by \$US85,659,000 of which \$US 82,919,000 was allocated to assets.

The Bailey and Sovereign acquisitions were accounted for using the purchase method and goodwill is being amortized on a basis consistent with Company policy.

Plateau purchased \$US204,000 of additional common stock of Inspiration Consolidated Copper Company in 1981; \$US219,000 in 1980; \$US28,046,000 in 1979, of which the Company's share of these purchases amounted to \$80,000 in 1981; \$128,000 in 1980; \$16,380,000 in 1979. As at December 31, 1981, Plateau has undertaken to purchase \$US978,000 additional common shares upon the redemption of preferred shares held by minority interests. In addition, Plateau purchased \$US19,323,000 of preferred stock of Inspiration Copper during 1981 of which the Company's share was \$6,908,000 with the balance provided by Minorco and Plateau Group working capital. These purchases were necessary to maintain the required tangible net worth of Inspiration Copper under that company's revolving credit agreement.

The unamortized excess of cost of investments in associated companies over equity in net assets is being written off against the Company's share of earnings generally over a period not exceeding 20 years.

4. OTHER INVESTMENTS

Total investments:	1981	1980
	<i>(in thousands)</i>	
Adobe Oil & Gas Corporation — at cost (market value — \$154,057,000) (see note below)	\$174,727	\$ —
Whitehorse Copper joint venture	8,640	8,485
Other — at cost:		
Quoted (market value 1981 — \$907,000; 1980 — \$1,820,000)	1,904	1,904
Unquoted	14,283	12,160
	199,554	22,549
Less provision for decline in value	7,411	9,786
	\$192,143	\$ 12,763

Changes in investment positions:	1981	1980	1979
	<i>(in thousands)</i>		
Adobe Oil & Gas Corporation . .	\$174,727	\$ —	\$ —
Rosario Resources Corporation (Note 13)	—	—	24,448
Other	4,993	2,530	1,014
	\$179,720	\$ 2,530	\$25,462

The Company makes provision, in amounts which it considers prudent, for declines in value of investments.

In August, 1981, Francana Oil & Gas Ltd. acquired approximately 27% of the common stock outstanding of Adobe Oil & Gas Corporation of Midland, Texas. The purchase price of \$174,727,000 (\$US140,673,000) was funded by a bank loan maturing July, 1983. This investment is accounted for by the cost method because Francana does not exercise a significant influence over Adobe.

5. SUPPLEMENTAL INFORMATION ON SIGNIFICANT INVESTMENTS ACCOUNTED FOR ON THE EQUITY METHOD

Selected information by business segment for the Plateau Group (equally owned with Minorco) in a combined form are given below. Prior to 1981, the Group's only business segment was metals and accordingly only combined information is given for 1980 and 1979. Complete financial statements of Plateau Group are included in the Company's Form 10-K.

The coal selected information includes the results from dates of acquisition during 1981 of the companies involved. The fertilizer and chemicals selected information includes the results of Terra Chemicals International, Inc. for the full year of 1981 on a pro-forma basis.

1981						1980	1979
METALS	COAL	FERTILIZERS & CHEMICALS	CORPORATE	COMBINED		COMBINED	COMBINED
<i>(in thousands \$US)</i>							
Total revenue	\$162,986	\$ 50,001	\$327,414	\$ 606	\$541,007	\$178,004	\$124,793
Operating profit (loss) . . .	\$(22,533)	\$ 1,767	\$ 15,992	\$ 606	\$ (4,168)	\$ (10,799)	\$ 9,413
Gain on sale of coal properties					10,402	—	—
General corporate expense.					(5,111)	—	—
Interest expense					(22,786)	(7,447)	(2,443)
Income taxes					(4,685)	(563)	(407)
Net earnings (loss)					\$(26,348)	\$(18,809)	\$ 6,563
FINANCIAL POSITION AT DECEMBER 31:							
Working capital	\$ 27,498	\$ 14,097	\$ 66,459	\$ 6,143	\$114,197	\$ 24,522	\$ 16,101
Other assets	172,365	99,836	87,621	—	359,822	147,529	116,747
Capital employed	199,863	113,933	154,080	6,143	474,019	172,051	132,848
Other liabilities	(90,216)	(9,327)	(35,367)	(119,509)	(254,419)	(75,812)	(17,951)
Net equity	\$109,647	\$104,606	\$118,713	\$(113,366)	\$219,600	\$ 96,239	\$114,897

NOTES continued

6. LINES OF CREDIT AND SHORT-TERM BORROWINGS

The Company and its major subsidiaries have unused lines of credit aggregating approximately \$145,000,000 (\$120,000,000 long-term) with banks in Canada and the United States with interest at bank prime rates. Francana Oil & Gas Ltd. has unused lines of credit of approximately \$49,000,000 (\$30,000,000 long-term) which is included in the totals above.

The maximum amounts of short-term borrowings outstanding during 1981, 1980 and 1979 were \$48,000,000, \$34,000,000 and \$12,000,000, respectively, and the approximate average amounts outstanding during each year were \$10,000,000, \$4,000,000 and \$2,000,000, respectively, with weighted average interest rates of 18.0%, 14.6% and 13.8%.

7. PROPERTY, PLANT AND EQUIPMENT

	1981	1980
	<i>(in thousands)</i>	
Metals	\$284,072	\$242,394
Petroleum	362,706	269,932
	<u>646,778</u>	<u>512,326</u>
Less accumulated depreciation and depletion	239,761	219,376
	<u>407,017</u>	<u>292,950</u>
Unamortized mine development expenditures	50,945	46,168
	<u>\$457,962</u>	<u>\$339,118</u>

8. COMMITMENTS AND CONTINGENCIES

- (a) The power plant at Island Falls, Saskatchewan was transferred to Saskatchewan Power Corporation on April 1, 1981, as well as certain ancillary assets. The Company received an interim payment of \$39,529,000 for the plant and the ancillary assets and has a tax liability of \$3,837,000 on capital cost allowance recapture as a result of this receipt.

As total compensation for the plant has not yet been determined by the Saskatchewan Court of Queen's Bench, the interim payment, net of tax liability is shown as part of deferred income in the consolidated statement of financial position. When the final compensation is determined the deferred income related to this transaction will be recorded as an extraordinary item.

- (b) During 1978 the Company received a reassessment notice from the Department of National Revenue disallowing the deduction of a nonrefundable contribution for construction to Manitoba Hydro made in 1973, which was, in the opinion of the Company, a proper deduction. On the advice of its counsel, the

Company has filed a formal Notice of Objection to the reassessment. Income taxes, penalties and interest paid with respect to the reassessment, aggregating \$2,100,000, have not been charged to earnings pending settlement of the reassessment. Should the reassessment be upheld, the tax and related costs would be charged to retained earnings as a prior period adjustment.

- (c) The Company and Minorco have each guaranteed severally the letter of credit granted Plateau Holdings Inc. to secure the instalment notes payable to the vendors of the Sovereign Coal Group Inc. and Harman Mining Corporation in the approximate amount of \$US67,000,000.

9. LONG-TERM DEBT

	1981	1980
	<i>(in thousands)</i>	
HUDSON BAY MINING AND SMELTING CO., LIMITED:		
9% unsecured debentures due 1991 (see (a) below)	\$ 19,996	\$ 20,001
10 1/2% unsecured debentures due 1995 (1981 — \$US45,474,000; 1980 — \$US50,000,000) (see (b) below)	46,169	50,764
Mortgage loans	247	266
FRANCANA OIL & GAS LTD.:		
Secured bank loan (\$US140,322,000) (see (c) below) ..	174,308	—
Unsecured bank loan (\$US13,750,000) (see (d) below) ...	16,306	—
	<u>257,026</u>	<u>71,031</u>
Included in current liabilities	2,181	3,395
	<u>\$254,845</u>	<u>\$ 67,636</u>

- (a) Under the trust indenture covering the 9% unsecured debentures, sinking fund payments sufficient to retire \$800,000 of principal amount are required each year until 1990. Debentures amounting to \$5,004,000 (principal amount) have been purchased by the Company and cancelled. Therefore, no sinking fund payments have been required to date and \$1,004,000 is available for application against future sinking fund requirements.
- (b) Under the trust indenture covering the 10 1/2% unsecured debentures, sinking fund payments sufficient to retire \$US3,330,000 of principal amount are required each year from 1981 until 1994. Debentures amounting to \$US4,526,000 have been purchased by the Company and cancelled. Therefore, no sinking fund payments

have been required to date and \$US1,196,000 is available for application against the 1982 sinking fund requirements.

- (c) The borrowing is secured by the shares of Adobe Oil & Gas Corporation and other assets as required by the bank. The loan is a US dollar facility with interest on either the bank's US dollar base interest rate or the prevailing LIBOR rate plus one-half of 1% and is repayable on July 27, 1983. Interest is payable quarterly. Francana has an unused credit facility on this borrowing of \$US9,678,000 on which it is obligated to pay a standby fee of one-quarter of 1%.
- (d) The unsecured loan represents borrowings under a credit agreement with two banks to borrow up to \$US30,000,000 for 2 years after which there is an option of converting to a 5 year term loan. The credit agreement provides for various interest rate options and requires the maintenance of certain minimum financial ratios.

Interest and related expenses on long-term debt were: 1981 - \$21,046,000; 1980 - \$10,513,000 and 1979 - \$10,595,000.

Sinking fund and principal payments, after allowing for prepayments, required over the next 5 years are as follows:

	Canadian funds	U.S. funds
	<i>(in thousands)</i>	
1982	\$ 14	\$ 2,134
1983	610	143,652
1984	814	3,330
1985	814	3,330
1986	814	3,330

10. SHARE CAPITAL AND EARNINGS PER SHARE

- (a) The Company is authorized to issue an unlimited number of common shares. As at December 31, 1981, 1980 and 1979 there were issued and fully paid 10,101,739 shares.
- (b) Under the Company's 1981 Key Executive Share Purchase Plan, 200,000 unissued shares are reserved for purchase by key executives of the Company, its subsidiaries and its other affiliates. Under the Company's 1981 Share Option Plan, 250,000 unissued shares are reserved for granting of options to designated key employees of the Company, its subsidiaries and its other affiliates. No purchases have been made and no options have been granted under either plan.
- (c) Earnings per share are calculated on the weighted average number of shares outstanding during the year (10,101,739 shares for 1981, 1980 and 1979).

11. INTEREST AND OTHER INCOME

	1981	1980	1979
	<i>(in thousands)</i>		
Interest income	\$13,984	\$14,964	\$10,073
Share of earnings of Whitehorse Copper joint venture	6,657	10,788	5,439
Gain on forward copper sales ..	3,206	—	—
Sale of natural gas properties (see below)	—	18,919	—
Cost of closing gold sale commitments	—	—	(8,468)
Translation of subsidiaries' accounts — unrealized	106	374	(363)
Profit on sale of investments ..	—	355	4,157
Miscellaneous	4,127	3,191	3,338
	<u>\$28,080</u>	<u>\$48,591</u>	<u>\$14,176</u>

During 1980, Francana Oil & Gas Ltd. sold natural gas properties in the United States for \$18,919,000 which is net of acquisition and development costs. The resultant contribution to net earnings, after provision for income tax and minority interest, was \$6,845,000.

12. INCOME TAXES, MINING TAXES AND ROYALTIES

	1981	1980	1979
	<i>(in thousands)</i>		
Income taxes:			
Current - Canada	\$(2,530)	\$ 4,505	\$ 410
- Foreign	21,834	26,237	16,642
Deferred - Canada	2,324	6,931	10,720
- Foreign	783	7,887	1,981
	<u>22,411</u>	<u>45,560</u>	<u>29,753</u>
Canadian mining taxes and royalties:			
Current	15,398	18,599	13,858
Deferred	(208)	1,937	2,403
	<u>\$37,601</u>	<u>\$66,096</u>	<u>\$46,014</u>

Income taxes have been calculated using the following effective income tax rates. The reconciliation of the combined Canadian Federal and Provincial statutory income tax rates and the effective income tax rate is as follows:

NOTES continued

	1981	1980	1979
Combined statutory income tax rate	49.6%	50.3%	49.6%
Nontaxable income	(10.1)	(2.1)	(0.3)
Canadian resource allowance	1.8	(7.9)	(3.8)
Depletion	5.8	—	(2.7)
Nondeductible mining taxes	20.7	9.2	8.3
Tax credits, rebates	(26.7)	(10.5)	(12.3)
Difference between Canadian and foreign tax rates	9.3	4.3	1.9
Inventory allowance	(3.1)	(0.7)	(1.4)
Exchange translation	—	(0.2)	0.1
Canadian petroleum and gas revenues tax	8.0	—	—
Other	3.9	(1.6)	6.0
Effective income tax rate	59.2%	40.8%	45.4%

The Company has available for application against future Canadian federal income taxes payable, if any, investment tax credits of approximately \$7,000,000 which expire in the years 1983 to 1986 inclusive.

Deferred income taxes represent tax reductions applicable to the timing differences between amounts claimed in the year for income tax purposes and amounts charged to earnings. The source of these differences and the tax effect of each were as follows:

	1981	1980	1979
	(in thousands)		
Depreciation and depletion	\$ 3,900	\$16,729	\$ 2,744
Amortization of mine development	829	1,522	1,430
Exploration expenditures	(694)	2,263	8,675
Rosario investment gain	—	(3,900)	—
Prior years' losses	—	(1,451)	—
Other	(928)	(345)	(148)
	\$ 3,107	\$14,818	\$12,701

Prior to 1978, an oil and gas subsidiary determined its Indonesian income taxes under a contract with the government which generally allowed for deduction of all costs incurred, although certain of these costs were capitalized and amortized for financial reporting purposes. It was not appropriate to provide for deferred Indonesian income taxes relative to these timing differences since additional future taxes were to be met by increased oil allocations under the production-sharing contract.

Effective January 1, 1978, the production-sharing contract was changed and Indonesian income taxes are now based on revenue and expense; deferred income taxes are being provided for relative to timing differences arising after that date. The capital costs as at December 31, 1977, will continue to be amortized and charged to earnings of future years as a nondeductible item. The unamortized balance of these nondeductible capital costs as at December 31, 1981, 1980 and 1979 was \$US14,200,000, \$US15,500,000 and \$US17,800,000, respectively.

13. GAIN ON SALE OF INVESTMENT

During 1979, the Company purchased a 9.8% holding in Rosario Resources Corporation for a cash consideration of \$24,448,000. In January, 1980, the Company made a tender offer for all of the outstanding shares of Rosario Resources Corporation at \$US65 per share. On February 1, 1980, the Company sold its holding for \$US75 per share for a total cash consideration of \$51,816,000 (\$US44,820,000) and withdrew its tender offer. This resulted in a gain of \$19,500,000 after related costs and tax provision of \$6,500,000 and a net increase in working capital of \$47,848,000.

14. RETIREMENT PLANS

The Company and its subsidiaries maintain non-contributory retirement plans which cover substantially all salaried and hourly paid employees.

During the year, upon the recommendation of the actuaries, the actuarial bases of the retirement plans were reviewed and modified to reflect current economic factors. The effect was to reduce the present value of benefit obligations by approximately \$13,000,000. The resultant surplus of plan assets over liabilities was used to upgrade certain benefits in the Canadian Metals Division calculated to cost \$9,700,000.

Total cost of the plans approximated \$2,473,000 in 1981; \$3,027,000 in 1980; \$2,980,000 in 1979 including past-service costs of \$268,000 in 1981; \$1,783,000 in 1980; \$1,591,000 in 1979.

The unfunded past-service liability with respect to all the plans at January 1, 1981, was approximately \$1,300,000, and is being funded and amortized over periods generally not exceeding 15 years. All vested benefits were fully funded as at January 1, 1981.

15. SUBSEQUENT EVENTS

(a) In February, 1982, Plateau Holdings Inc., through Inspiration Coal Inc., completed the acquisition of all of the assets of the Wheelwright, Kentucky, division of Island Creek Coal Company, excepting working capital and net of certain contingent and noncurrent liabilities at a cost of \$US26,000,000. This acquisition was financed by \$US17,000,000 of 14%, 5 year notes, repayable in equal quarterly instalments, taken back by the vendor with the balance paid in cash by Plateau Holdings Inc., without contribution from its shareholders.

(b) In February, 1982, Plateau Holdings Inc., through Inspiration Coal Inc., signed a Letter of Intent with Compagnie Francaise des Petroles (CFP), a French company, which contemplated the formation of a joint venture. Inspiration Coal Inc. would contribute substantially all of its assets except its working capital, (which is to be sold separately to the joint venture), less debt and its noncurrent liabilities. CFP would contribute cash.

The net effect of the formation of the proposed joint venture would be to reduce the Company's interest in the

coal division from 50% to 25% and to increase Plateau Group cash position by approximately \$US105,000,000. The joint venture will have approximately \$US65,000,000 in debt including the above mentioned \$US17,000,000 note from Island Creek Coal Company.

(c) Under an agreement dated February 1, 1982, Francana Oil & Gas Ltd., and Sceptre Resources Limited will proceed with a reorganization of Francana whereby Sceptre will acquire Francana's Canadian operations and the non-Canadian operations will be acquired by the Company and Mincan. The reorganization will be completed as follows:

- (i) Francana will transfer its interest in Adobe Oil & Gas Corporation shares and \$68,000,000 of related debt, to Trend International Limited in exchange for convertible preferred shares of Trend. If fully converted, Francana's interest in Trend would increase from the present level of 57%.
- (ii) The Company, Mincan, and Francana will enter into an agreement whereby, subject to certain consents and contingent on the Sceptre agreement (see (iii) below) being approved, the Company would acquire Mincan's 17% interest in Francana in exchange for a \$53,600,000 note. The Company would then contribute all of its Francana shares to Francana in exchange for all of Francana's shares in Trend.
- (iii) Francana and Sceptre will enter into an agreement whereby, subject to certain consents and contingent upon the above noted agreement being approved, the Francana minority shareholders would exchange each of their shares for 2.15 shares of Sceptre. As a result, the Canadian assets of Francana in which the Company would retain no interest, would be held by Sceptre.

This reorganization is conditional upon approval by the public shareholders of Francana, by regulatory authorities, by the Alberta Court of Queen's Bench and also by receipt of satisfactory assurances from Canadian tax authorities that the reorganization will not result in any Canadian income tax liability to the Company, Francana or the Canadian public shareholders of Francana.

While no final decision has been made, it is presently contemplated that the Company and Minorco will at some future date rearrange their shareholdings in Trend so as to be approximately equal. As a result of this final step in the reorganization, the \$53,600,000 note referred to in (ii) above will be eliminated.

16. DIFFERENCES BETWEEN CANADIAN AND UNITED STATES GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

As disclosed in Note 1, the financial statements are prepared in accordance with accounting principles generally accepted

in Canada. While a number of differences exist between Canadian and U.S. generally accepted accounting principles the Company believes that financial statements prepared according to either basis would result in similar interpretations by the reader. The only significant effect on reported earnings of the Company which would arise using U.S. generally accepted accounting principles would be the recording of unrealized exchange gains and losses on conversion of foreign currency long-term debt because of the use in the U.S. of end-of-period rates of exchange. Net earnings would be increased by \$6,200,000 (61 cents per share) in 1981, reduced by \$550,000 (5 cents per share) in 1980 and increased by \$1,300,000 (13 cents per share) in 1979.

17. BUSINESS SEGMENT REPORTING

Financial data for 1981, 1980 and 1979 pertaining to the business segments of the Company are included on pages 20 and 21. The segments are as follows:

Business segment	Operations
Metals	Exploration, mining, milling, smelting, refining and sale of copper, zinc, gold, silver and cadmium; production and sale of zinc oxide and zinc diecastings.
Petroleum	Exploration, development, production and sale of natural gas, oil and condensates.
Corporate	Corporate operations relate primarily to the management and administration of cash, short-term securities and investments.

18. SUPPLEMENTARY PETROLEUM INFORMATION

Additional information on petroleum production, reserves, revenues, costs and an alternative accounting basis, Reserve Recognition Accounting is included following the notes.

DIVIDENDS, MARKET PRICE RANGES AND RELATED SECURITY HOLDER MATTERS (unaudited)

(By Quarters)

	Dividends Declared (Cdn)	Market range			
		Toronto stock exchange (Principal market, \$Cdn)		New York stock exchange (\$US)	
		High	Low	High	Low
1981					
1st	30¢	37 3/8	29 1/2	31	24 5/8
2nd	30¢	35	28	29 7/8	23 1/2
3rd	30¢	31	22 7/8	25 7/8	19 1/8
4th	15¢	25 1/4	21 1/4	21 1/2	17 3/4
1980					
1st	30¢	38 1/8	21 1/2	33	17 7/8
2nd	30¢	28 1/4	22 3/4	24 5/8	19 1/4
3rd	30¢	35 3/4	27 3/8	30 7/8	24
4th	30¢	40	31 1/2	34 1/2	26 1/2

On December 31, 1981 the Company had 8,316 shareholders (1980 - 8,851) and the total number of shares issued was 10,101,739, unchanged from 1980.

SUPPLEMENTARY PETROLEUM INFORMATION

The Securities and Exchange Commission (SEC) of the United States requires disclosure of the following supplementary financial and other information relating to oil and gas activities. The Company's petroleum operations are carried out by a 58%- owned subsidiary, Francana Oil & Gas Ltd. Francana follows the full cost method of accounting for oil and gas properties which is consistent with current SEC requirements.

Selected cost and revenue information

	Canada	United States	Indonesia
1981			
Capitalized costs	\$168,677	\$117,706	\$ 76,534
Accumulated depreciation and depletion	52,273	21,630	44,519
Property acquisition costs . .	4,046	19,011	3,676
Exploration costs	11,955	28,871	523
Development costs	9,754	9,048	5,129
Production (lifting) costs . .	6,219	3,734	13,789
Depreciation and depletion provisions	8,306	10,286	6,293
Depreciation and depletion per equivalent barrel produced	2.93	17.59	4.38
Net revenues from developed reserves	25,381	12,945	50,898
1980			
Capitalized costs	\$142,843	\$ 63,060	\$ 64,029
Accumulated depreciation and depletion	43,416	11,559	38,226
Property acquisition costs . .	3,397	6,924	—
Exploration costs	10,152	18,146	1,135
Development costs	6,428	8,866	2,449
Production (lifting) costs . .	6,450	2,486	10,162
Depreciation and depletion provisions	10,003	4,590	5,941
Depreciation and depletion per equivalent barrel produced	2.70	8.02	3.56
Net revenues from developed reserves	28,518	7,468	52,923
1979			
Capitalized costs	\$121,858	\$ 47,261	\$ 58,686
Accumulated depreciation and depletion	33,406	9,904	32,479
Property acquisition costs . .	6,315	1,730	—
Exploration costs	9,148	4,899	166
Development costs	8,346	8,823	2,220
Production (lifting) costs . .	5,354	1,796	8,491
Depreciation and depletion provisions	8,616	2,829	5,805
Depreciation and depletion per equivalent barrel produced	2.00	5.04	2.91
Net revenues from developed reserves	25,824	4,557	34,676

- Capitalized costs and related accumulated depreciation and depletion are as at year-end.
- All other data relate to the year indicated.
- Cost data include costs capitalized and expensed.
- Capitalized costs relating to producing operations are depreciated and depleted using the unit-of- production method based on estimated proven reserves. For this calculation, natural gas reserves and production are stated in equivalent barrels of crude oil based on relative net sales value.
- Net revenues are after royalties and production costs but exclude depreciation, depletion and interest costs.

Selected estimated reserve information (unaudited)

	Canada		United States		Indonesia
	Crude oil	Natural gas	Crude oil	Natural gas	Crude oil
December 31, 1978:					
Proved reserves	16,633	206,313	2,437	102,916	12,913
Proved and developed reserves	16,513	187,686	2,282	30,018	12,913
1979:					
Revisions of previous estimates	(4,907)	(19,658)	(217)	(68,835)	(1,873)
Extensions, discoveries and other additions . . .	469	21,151	574	6,765	45
Production	(1,119)	(18,051)	(361)	(1,460)	(2,007)
December 31, 1979:					
Proved reserves	11,076	189,755	2,433	39,386	9,078
Proved and developed reserves	10,946	189,755	2,067	28,567	9,078
1980:					
Revisions of previous estimates	238	(7,298)	(335)	(818)	1,479
Extensions, discoveries and other additions . . .	24	15,951	1,052	9,013	—
Production	(1,217)	(15,038)	(363)	(1,415)	(1,668)
Sale of reserves in place . .	—	—	—	(26,482)	—
December 31, 1980:					
Proved reserves	10,121	183,370	2,787	19,684	8,889
Proved and developed reserves	10,121	183,370	1,921	14,772	8,889
1981:					
Revisions of previous estimates	304	(2,463)	(226)	(2,273)	4,181
Extensions, discoveries and other additions . . .	623	31,690	371	3,870	—
Production	(1,006)	(12,509)	(412)	(1,798)	(1,420)
December 31, 1980:					
Proved reserves	10,042	200,088	2,520	19,483	11,650
Proved and developed reserves	10,042	200,088	2,288	17,974	11,650

The above table shows continuity of proved reserves of crude oil (thousands of barrels) and natural gas (millions of cubic feet) from December 31, 1978 through December 31, 1981 and includes proved and developed reserves as at each year-end. All reserve data are before royalties and mineral taxes.

Indonesian reserves represent an entitlement to gross reserves in accordance with the production-sharing contract.

Proved reserves are estimated quantities of crude oil, natural gas and natural gas liquids which have been demonstrated, with reasonable certainty, to be recoverable in future years from known reservoirs under existing economic and operating conditions. The estimates are based on judgements and interpretations of data dependent upon uncertainties including market conditions, government action and the environment itself. Ultimate recovery from proved reserves may be different from these estimates.

The latest estimates of oil and gas reserves were made by McDaniel & Associates Consultants Ltd. for Canadian properties and by H. K. van Poollen and Associates, Inc. for United States properties. The Company's entitlement to Indonesian reserves has been calculated by Trend Exploration Limited's engineering staff.

During 1981, Francana acquired a 27% interest in Adobe Oil & Gas Corporation of Midland, Texas. This investment has been accounted for on the cost method because Francana does not exercise a significant influence over Adobe and accordingly, no estimated reserve information has been included for Adobe.

The impact of subsequent events disclosed in Note 15(c) to the financial statements on page 37, if completed, would

materially affect Francana and would substantially change the future financial statements and operations of the petroleum segment. Based on the proposed reorganization agreement, the Canadian operations of Francana will be acquired by Sceptre Resources Limited and the non-Canadian operations will be acquired by the Company and Minorco Canada Limited.

Reserve estimates and production volumes represent ownership interest before deduction of royalties. The Company believes this presentation provides the most meaningful and appropriate information because present Canadian royalty rates on Crown leases in certain provinces are dependent upon and can vary significantly with changes in prices, production rates and other factors.

FUTURE NET REVENUES FROM ESTIMATED PRODUCTION OF PROVED OIL AND GAS RESERVES

(unaudited)

The present values at December 31, 1981, 1980 and 1979 of estimated future net revenues (using a 10% discount factor) obtainable from proved oil and gas reserves are set forth in the following table. Estimated future net revenues have been calculated on an undiscounted basis and assume continuation of current prices, royalty rates, costs and economic conditions. Lifting costs, royalties, future capital costs (based on current costs) and United States windfall profits tax have been deducted from gross revenues in arriving at net revenues; depreciation, depletion, interest, income taxes, including the 8% petroleum and gas revenue tax, and Indonesian income tax have not been deducted. Current exchange rates have been used.

	Canada		United States		Indonesia	
	Proved developed and undeveloped	Proved developed	Proved developed and undeveloped	Proved developed	Proved developed and undeveloped	Proved developed
1982.....	31,321	31,321	14,991	16,442	29,994	29,994
1983.....	28,051	28,051	14,774	13,564	24,004	24,004
1984.....	26,505	26,505	12,818	10,466	18,571	18,571
Thereafter ..	280,793	280,793	67,523	60,524	61,308	61,308

RESERVE RECOGNITION ACCOUNTING

(unaudited):

The SEC has concluded that the traditional methods of accounting for oil and gas activities, including the full cost method, fail to provide sufficient information on financial position and operating results relating to these activities. They do not provide timely recognition of oil and gas reserves in reported assets and earnings. Accordingly, the SEC has developed reserve recognition accounting (RRA) which is to be provided as supplementary information.

The more significant differences between RRA and full cost accounting are:

- (i) Under RRA, the defined value of proved oil and gas reserves plus temporarily deferred costs relating to the exploration for and development of additional reserves are reported as an asset on the statement of financial position, whereas using full cost accounting, all costs associated with the exploration for and development of oil and gas reserves are reported as an asset on the statement of financial position.
- (ii) Under RRA, additions to proved reserves and changes in valuation of proved reserves are included in the current income statement. The value of reserve additions is reduced by all costs already incurred in the related exploration and development process plus the present value of all estimated future costs for the development and production of these reserves. Non-productive exploration and development costs are charged to the earnings statement as incurred. Changes in valuation include changes in previous reserve estimates, oil and gas prices, future production and capital costs and production schedules. The actual production and sale of oil and gas does not directly affect the earnings statement.
- (iii) Under full cost accounting, additions to proved reserves and changes in valuation of proved reserves do not immediately affect the earnings statement, unless the depreciation, depletion and amortization rate per unit produced changes.

Procedures used to develop a present dollar valuation of proved reserves begin with an estimate of quantities of proved reserves by year of expected production based on current economic conditions. These quantities are then valued using year-end prices adjusted for control escalation provisions that are fixed and determinable. Future gross reserves are reduced by the estimated future cost of developing and producing the reserves based on year-end cost estimates. The resulting future net reserves are then discounted to the present value amount by applying a ten percent discount factor.

This valuation procedure does not necessarily yield the best estimate of fair market value because such an estimate should also take into account, among other factors, the likelihood of future recoveries of oil and gas in excess of proved reserves and anticipated future prices of oil and gas and related development and production costs.

Net additions to estimated proved reserves represent the discounted gross revenues expected from those reserves added during the year from exploration and development wells net of estimated future development and production costs. Revisions to estimates of reserves proved in prior years include the effect of changes in estimated future development production costs and estimates of ultimately recoverable quantities of proved reserves have been aggregated. The impact from the passage of time on the discounted cash flow approach to the valuation of proved reserves is represented by the accretion of discount.

Those costs associated with finding and developing the current year's additions to proved reserves in addition to all costs determined to be nonproductive during the year are reported as expenses for the current year. The costs of acquiring unproven properties and drilling exploration wells are deferred. Any development costs incurred in the current year, but applicable to reserves added in prior years, are included in the current year's summary of oil and gas producing activities only to the extent that actual costs exceeded estimated costs during the year. Expenditures for development costs result in a higher present value and reduce the deduction used in computing future cash flows. Accordingly, they appear in the reconciliation of changes in the present value of estimated net revenues.

The total provision for income taxes includes both a current and a deferred provision. The current provision is based on oil and gas activities during the period. The deferred provision is computed by first applying current statutory tax rates to the future taxable income to be generated from proved reserves and deducting the similarly computed liability as of the beginning of the year. Future taxable income is the difference between the RRA valuation of proved reserves and the current tax basis of the properties involved, after taking into account permanent differences and investment tax credits.

The following schedules summarize the effect of all oil and gas activities on the current year's income and reconcile the changes in present value of estimated future net reserves from proved reserves using the above noted principles of reserve recognition accounting.

CONSOLIDATED SUMMARY OF OIL AND GAS ACTIVITIES ON THE BASIS OF RESERVE RECOGNITION ACCOUNTING

For the years ended December 31, 1981, 1980 and 1979

	1981	1980	1979
	(in thousands)		
Additions and revisions to estimated proved oil and gas reserves:			
Additions to estimated proved reserves, net.....	\$ 33,483	\$ 27,383	\$ 31,969
Revisions to estimates of reserves proved in prior years:			
Changes in prices	30,361	80,694	107,984
Other.....	(14,505)	19,122	(17,085)
Accretion of discount	34,668	29,800	18,992
	84,007	156,999	141,860
Less evaluated acquisition, exploration and development costs incurred including impairments.....	69,723	33,342	29,857
RRA income before other revenue.....	14,284	123,657	112,003
Other revenue (expenses):			
Interest and other income.....	11,403	3,351	4,064
General and administrative	(6,892)	(6,599)	(4,274)
Interest on long and short-term debt	(15,506)	(2,868)	(2,712)
Gain (loss) on translation of foreign currency	(87)	513	(353)
Total other expenses	(11,082)	(5,603)	(3,275)
RRA income before taxes and minority interests (see note below)	3,202	118,054	108,728
Provision for income taxes	30,741	56,981	57,970
RRA net income (loss) before minority interests	\$(27,539)	\$ 61,073	\$ 50,758

Petroleum operating earnings before taxes and minority interests, as reflected in the consolidated statement of earnings on page 28, for the years ended December 31, 1981, 1980 and 1979 was \$63,491,000, \$98,178,000 and \$56,157,000 respectively.

CONSOLIDATED CHANGES IN PRESENT VALUE OF ESTIMATED FUTURE NET REVENUE FROM PROVED OIL AND GAS RESERVES

For the years ended December 31, 1981, 1980 and 1979

	1981	1980	1979
	(in thousands)		
Increases:			
Additions and revisions	\$ 84,007	\$156,999	\$141,860
Expenditures that reduce estimated future development costs	5,451	13,082	11,233
Subtotal	89,458	170,081	153,093
Decreases:			
Sales of oil and gas, net after royalty	105,485	108,007	80,698
Less: Production and operating costs	26,733	19,098	15,641
	78,752	88,909	65,057
Sales of reserves in place	—	32,498	—
Subtotal	78,752	121,407	65,057
Net increase	10,706	48,674	88,036
Beginning of the year	346,683	294,282	207,786
Adjustment for translation of foreign currency	9	3,727	(1,540)
End of the year	\$357,398	\$346,683	\$294,282

SELECTED FINANCIAL DATA

	1981	1980	1979	1978	1977
	<i>(in thousands except per share data)</i>				
Capital expenditures	\$171,936	\$ 79,152	\$ 78,706	\$ 73,011	\$ 55,319
Investment expenditures	193,865	4,816	43,317	27,109	11,306
Working capital	61,636	135,522	76,740	117,271	168,029
Total assets	950,899	721,331	620,274	551,989	523,693
Capital employed	848,354	615,425	542,900	489,360	471,806
Long-term debt	254,845	67,636	91,443	89,220	89,496
Shareholders' investment	315,296	336,656	285,670	262,135	256,935
Dividends	10,607	12,122	8,081	—	6,061
Dividends paid per share	1.05	1.20	0.80	—	0.60
Revenues:					
Net sales	\$419,970	\$433,891	\$365,204	\$261,139	\$248,158
Other income	28,080	48,591	14,176	15,478	10,226
Cost and expenses	395,039	350,318	297,535	233,067	209,154
Taxes and royalties	37,601	66,096	46,014	27,702	36,203
Minority interest	15,434	23,657	12,088	11,138	10,551
Equity earnings (losses)	(10,729)	(970)	4,652	490	3,240
Earnings (loss) before extraordinary items	(10,753)	41,441	28,395	5,200	5,716
Extraordinary items	—	21,667	3,221	—	52,577
Net earnings (loss)	(10,753)	63,108	31,616	5,200	58,293
Earnings (loss) per share:					
Before extraordinary items	(1.06)	4.10	2.81	0.51	0.57
After extraordinary items	(1.06)	6.25	3.13	0.51	5.77

SELECTED QUARTERLY CONSOLIDATED FINANCIAL DATA *(unaudited)*

	Quarters ended			
	March 31	June 30	Sept. 30	Dec. 31
	<i>(in thousands except per share data)</i>			
1981				
Net sales	\$117,060	\$105,495	\$ 97,517	\$ 99,898
Earnings before taxes, royalties and other items	24,286	23,868	4,643	214
Net earnings (loss)	852	9,065	(4,885)	(15,785)
Earnings (loss) per share	0.08	0.90	(0.48)	(1.56)
Dividends paid per share	0.30	0.30	0.30	0.15
1980				
Net sales	\$118,667	\$100,376	\$ 95,771	\$119,077
Earnings before taxes, royalties and other items	41,510	24,428	40,782	25,444
Earnings before extraordinary items	20,571	10,345	5,948	4,577
Net earnings	41,564	10,543	5,443	5,558
Earnings per share:				
Before extraordinary items	2.04	1.03	0.58	0.45
After extraordinary items	4.11	1.05	0.54	0.55
Dividends paid per share	0.30	0.30	0.30	0.30
1979				
Net sales	\$ 90,460	\$ 90,377	\$ 79,568	\$104,799
Earnings before taxes, royalties and other items	19,942	19,706	18,984	23,213
Earnings before extraordinary item	2,703	13,698	3,605	8,389
Net earnings	2,703	13,698	3,605	11,610
Earnings per share:				
Before extraordinary item	0.27	1.36	0.35	0.83
After extraordinary item	0.27	1.36	0.35	1.15
Dividends paid per share	0.10	0.20	0.20	0.30

Quarterly financial information is restated to reflect the deconsolidation of Terra Chemicals International, Inc. as explained in Note I.

DIRECTORS

E.M. Carson, Phoenix
*President and Chief
Executive Officer
First Interstate Bank of Arizona, N.A.*

J.N. Clarke, London
*Managing Director and Chief Executive
Charter Consolidated P.L.C.
A mining and finance company*

*† H.P. Crawford, Q.C., Toronto
*A Senior Partner
Osler, Hoskin & Harcourt
Barristers and Solicitors*

+† E.P. Gush, Toronto
*Chairman, President and
Chief Executive Officer
Hudson Bay Mining*

+ R.H. Jones, Winnipeg
*Chairman and Chief Executive Officer
The Investors Group
A financial holding company*

+† A.T. Lambert, Toronto
*Former Chairman
The Toronto-Dominion Bank
A Canadian chartered bank*

* W.A. Morrice, Victoria
*Former President (retired)
Hudson Bay Mining*

J.R.B. Phillimore, London
*Vice President-Administration
Minorco
An investment company*

G.W.H. Rely, Johannesburg
*Joint Deputy Chairman
Anglo American Corporation
of South Africa Limited
A mining and finance company*

*† A. Sweatman, Q.C., Winnipeg
*Partner; Thompson, Dorfman, Sweatman
Barristers and Solicitors*

J.D. Taylor, Q.C., Toronto
Company Director

V. Van Sant, Jr., Calgary
*Chairman and Chief Executive Officer
Francana Oil & Gas Ltd.
A petroleum company*

OFFICERS

E.P. Gush
*Chairman, President and Chief
Executive Officer*

H.S. Schwartz
*President
Canadian Metals Division*

J.B. Howkins
*Senior Vice President -
Exploration and Corporate*

M.B. O'Shaughnessy
*Senior Vice President -
Marketing*

C.K. Taylor, Q.C.
*Senior Vice President
Secretary and General Counsel*

S.R. Horne
Vice President - Investments

D.H. Houston
Vice President - Taxation

D.W. Perks
*Vice President - Finance
Treasurer and Chief
Financial Officer*

W.A. Atkinson
Comptroller

S. Kozel
Assistant Secretary

MAJOR HOLDINGS

METALS/INDUSTRIAL PRODUCTS

Canadian Metals Division:

Flin-Flon/Snow Lake Operations (100%)

Francona Minerals Division (100%)

Hudson Bay Diecastings Division (100%)

Tantalum Mining Corporation of

Canada Limited (37.5%)

Whitehorse Copper Mines Division (100%)

Zochem Division (100%)

Compania Cuprifera La Verde, S.A. (32%)

Hudson Bay Exploration and
Development Company Limited (100%)

Inspiration Consolidated Copper Company (50%)

Inspiration Mines Inc. (50%)

Stikine Copper Limited (35.8%)

PETROLEUM

Francona Oil & Gas Ltd. (57.9%)

Trend International Limited
(Francana Oil & Gas holds 56.8%)

FERTILIZERS AND AGRICULTURAL PRODUCTS

Terra Chemicals International Inc. (50%)

COAL

Inspiration Coal Inc. (50%)

TRANSFER AGENTS

The Royal Trust Company -

Montreal, Toronto, Winnipeg,
Regina, Calgary, Vancouver.

**Morgan Guaranty Trust Company
of New York -**
New York, N.Y.

REGISTRARS

Montreal Trust Company -

Montreal, Regina

Crown Trust Company -

Toronto, Winnipeg, Calgary, Vancouver

The Chase Manhattan Bank -

New York, N.Y.

* Member of Executive Committee

+ Member of the Audit Committee

† Member of Compensation Committee

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Zochem Division

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Inspiration Mines Inc.

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Inspiration Development Company

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